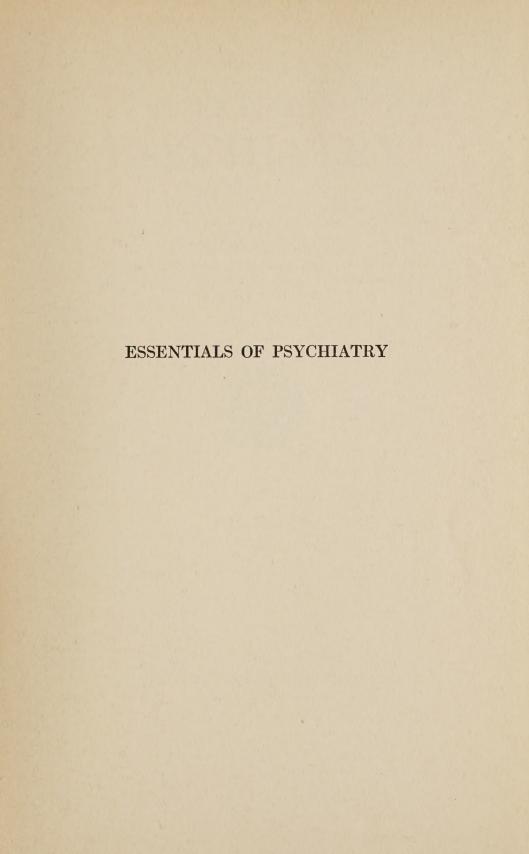
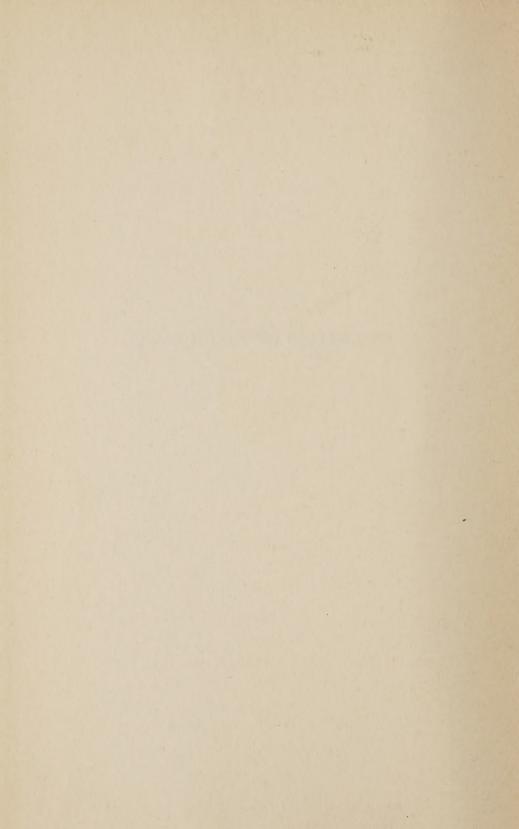


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# ESSENTIALS OF PSYCHIATRY

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THIRD EDITION

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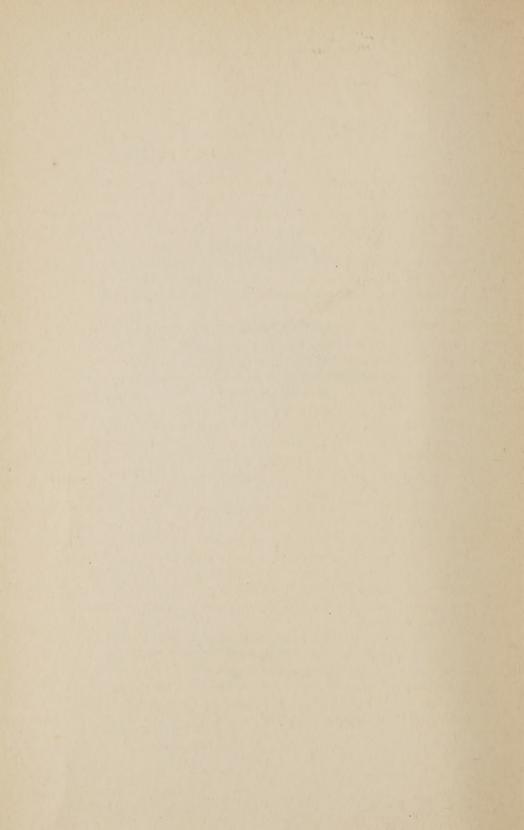
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COMPOSED AND PRINTED AT THE WAVERLY PRESS, INC. FOR THE WILLIAMS & WILKINS COMPANY BALTIMORE, MD., U. S. A. This book is dedicated to

WILLIAM LOGIE RUSSELL
a man whose honor and fairness to all, and a physician
whose unselfish efforts in the interest of psychiatry,
are worthy of emulation



#### PREFACE TO THIRD EDITION

With the rapid progress being made in the field of psychiatry comes the need of frequent revisions of any formal presentation of this subject. At the same time a textbook must be conservative and should preserve all that experience has proven to be valid.

Psychiatry has become as scientific as any other branch of medicine even though its complexity leads to misinterpretation and erroneous application of its principles. It teaches that all of the facts regarding illness must be taken into consideration. This requires a study of the patient as well as his disease so that no factor in the illness will escape therapeutic efforts. The fact that psychiatry deals more particularly with disorders which affect the total functions of an individual and his relations to society means that a profound knowledge of human strivings and relationships must be added to that derived from the traditional course in medicine.

In this book an effort has been made to present the essentials of psychiatry in rather simple language so that the reader may be introduced to this subject without the labor of translating technical phraseology. Those who wish to venture further into this field will find abundant material for study in the numerous references which are given.

The temptation to avoid serious contemplation of personality disorders through the application of a few formulae which theoretically may seem plausible is at present very great. It is difficult at any time to differentiate between the validity of that which is endorsed by popular enthusiasm and that which has stood the test of experience. Even a short journey into the history of medicine shows that a scientific training does not wholly eliminate the tendency to be distracted by false teachings.

Progress in psychiatry just as in any other branch of medicine requires that the facts be carefully determined and considered rather than selected to conform with some doctrine. There is no short road to the understanding of human reactions and it is only after years of training and experience that the physician is prepared to deal adequately with personality disorders.

This book is a complete revision and to some extent an elaboration of the preceding edition. If it continues to attract students to this most fascinating field of human interest I shall feel repaid for my efforts.

I am indebted to Drs. Charles Macfie Campbell, Clarence O. Cheney, William H. Dunn, Arthur W. Grace, Gerald R. Jameison, Norvelle C. LaMar, William L. Russell and James H. Wall for their careful reading of the manuscript and the valuable suggestions which I have received from them. I am also indebted to Miss Adele Poston, R. N., Miss Carolyne A. Sprogell, R. N., and Mr. William C. Roden, R. N., for their assistance with the chapter on psychiatric nursing.

I wish to express my sincere gratitude to my wife, Eleanor Siebert Henry, for many helpful suggestions and for her assistance in much of the tedious work which is inevitable in the production of a book of this kind.

GEORGE W. HENRY

#### INTRODUCTION

In the twelve years that have elapsed since the first edition of this book was published, psychiatry has come to occupy an increasingly important place in the medical curriculum. In the medical and surgical wards the physician begins to be alert to the contribution which the personality of the patient makes to the clinical picture; the psychoneurotic is no longer dismissed as a weakling and blameworthy but receives systematic study and treatment; patients with serious mental disorder are studied with the resources of the medical laboratory and a growing insight derived from psychology and anthro-Thus the medical student no longer looks for his psychiatric material exclusively in the mental hospital; he finds it also in the general and the various special hospitals, in the schools, in the courts, in the everyday setting of the factory and the office. As the field of psychiatry has broadened new methods have been utilized, and formulations are required that go beyond the outward classification of the traditional psychiatry, and do fuller justice to the complexity of the individual mental disorder.

This extension of the territory of psychiatry is not without its embarrassments. Part of the territory is not fully explored, the borders have not everywhere been delimited, the more settled regions still require intensive cultivation, administration has to combine the application of general principles with a certain degree of local autonomy. Where there is progress in many directions, involving both psychiatric practice and investigation, it is not easy to present to the student and to the general practitioner both the classical body of doctrine and the more dynamic conceptions and interpretations which dominate recent investigations. The older psychiatry dealt with general processes and reactions; the psychiatry of to-day is intensely individual. It is this individual and concrete material which it is too difficult to present within brief compass. Yet it is this concrete material, the very stuff of life, which the teacher must emphasize and he can only use the older generalizations for preliminary orientation and as a provisional framework.

In the Essentials of Psychiatry Doctor Henry has presented to the medical profession an orderly system of psychiatric doctrine and has at the same time kept in the foreground the dynamic aspect of the individual psychosis. His hospital positions have given him an unusual experience with patients presenting the greatest variety of bodily and mental ailments, and have familiarized him with the problems of their care and treatment. The third edition of this work gives evidence of the author's close contact with recent developments in the psychiatric field. It retains however the original character of presenting the essentials of its subject and makes no claim to cover details in a comprehensive way. The student or practitioner receives from this book an excellent orientation in the field of psychiatry and will find in it a sound preparation for more intensive and more highly specialized studies in the field of psychiatry.

CHARLES MACFIE CAMPBELL

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#### CHAPTER I

#### PERSONALITY DEVELOPMENT

Psychiatry is a branch of medicine dealing with the study and treatment of disorders which involve the attitude, behavior and thinking of an individual and which are motivated by instinctive and emotional conflicts. A small proportion of the patients thus disordered have in addition some contributory disease or defect of the brain, but even in these cases the manifestations of illness are in large part distortions of the underlying personality. A clue to the understanding of these disorders may be obtained from the general principle that whenever an individual is unable to adjust to stress he tends to revert to an earlier and less complicated form of adaptation. It is therefore desirable to have an understanding of the origin and development of personality characteristics before attempting to study the ways in which a personality may deviate from the usual standards of health.

Such an understanding may be obtained in part by noting the appearance and development of human characteristics, but, inasmuch as we are already infinitely complex at birth, both as to structure and function, it is necessary to seek information in regard to earlier stages of development from studies of lower animal life. This is permissible because during uterine life we pass through relatively the same stages of development as are observed in the evolution of the more primitive animals. It is interesting also to observe the extent to which there are cells, structures and functions in the human being analogous to those found in lower animal life.

If we start with the lowest forms we find a variety of microscopic one-celled organisms, or protozoa, consisting of undifferentiated masses of protoplasm, without special senses or structures for receiving stimuli. The functions of these organisms consist of most primitive forms of locomotion, ingestion of food, and reproduction at certain intervals by simple division into two parts. In spite of their simplicity they are sensitive to light, heat, color, chemicals, currents, gravity, electricity, physical contact and probably many other forms

of stimuli. Closely resembling in both structure and function the simplest variety of these organisms is the leucocyte of the human blood. Likewise human spermatozoa resemble those protozoa which travel by means of a hair-like process at one end. These human cells, like the protozoa, have exceedingly small chance of survival, and to compensate for this they are reproduced by the million.

When we study higher forms of animal life, we find increasing complexity of structure and function, with ever greater chances of survival and correspondingly less capacity for reproduction. This is due largely to the fact that the individual cells are no longer entirely dependent upon their own resources. Having become specialized in their functions through community life they aid each other as well as the organism of which they are a part. Thus in a very simple organism like the hydra there are different cells for purposes of reproduction, digestion, and conduction of impulses. In the specialization for the conduction of impulses we have the beginnings of a nervous system. The so-called sensory cells which have become adapted to receiving stimuli from the outer world transmit impulses to intermediate nerve cells which, in turn, send them to muscle cells. The function of these cells as a whole corresponds to that of a simple reflex arc. In many respects the fimbriated end of the human Fallopian tube suggests the structural organization found in the hydra.

In the hydra the nervous system is scattered throughout the body wall. The starfish, somewhat more highly developed, shows a tendency toward centralization of the nervous system. Each arm has its own system which communicates at the center of the fish with those of the other arms. The starfish also shows the beginning of a specialization of nerve cells in having on its ventral surface a rudimentary olfactory organ.

Centralization of the nervous system obviously coördinates the functions of the various parts of the animal and renders possible increasing variety and complexity of function. This in turn makes the struggle against environment more successful and the chances of survival greater—the aim of all animal life.

A beginning of the vegetative nervous system of the higher animals is seen in round worms with the division of the body into segments, each segment having a nervous system formed by a grouping of nerve cells. These nerve cells or ganglia attend to the immediate needs of the segments and also function for the good of the animal as a whole through nerve fibers which connect the ganglia.

The next definite step in development is manifested in insects by the more marked segmentation of the body and nervous system, with the formation of antennae, or feelers, which often have special sense organs. Of greater importance than this is the more rapid growth of the anterior portion of the nervous system associated with the development of special sense organs.

The presence of a cornea, lens, vitreous humor, and a rod and pigmented layer in the retina of the eyes of spiders suggests a capacity to discriminate different shades of gray. Not only do insects give evidence of the development of special sense organs but they also present the beginnings of community life. With the honey-bees the division of labor among drones, queens and workers gives them a high degree of social organization. The workers secure and store food, nurse the young and build cells for a future generation of bees. The queen bee lays eggs in these cells and later leads her worker offspring away in a swarm to establish a new home. A young queen, after stinging to death other helpless undeveloped females, starts on a nuptial flight, is pursued by young drones, mates with one of them, and returns as queen mother of another generation of bees. The drones apparently have no function except that of mating. Otherwise they are merely tolerated as long as there is an abundance of food.

It is somewhat difficult to decide where reflex action merges into instinctive behavior which is dependent upon a degree of structural and functional development common to insects. In any case they are generally selected to illustrate unmodified instincts. The construction of cells, the storing of food, and the nuptial flight of the honey-bee are considered as typical examples of instinctive behavior. Instincts may be regarded as inherited tendencies to action. They appear to be a survival of habits established through the experience of an infinite number of ancestors and which have proved beneficial both to the individual and to the species. In primitive animal life behavior is probably determined by simple chemical and physical forces while in the more highly developed animals behavior is determined also by reflex activity. Such activity involves only a part of the individual whereas instinctive behavior is of interest to the whole individual or to the species. The capacity to react to chemical and physical forces in a reflex and instinctive manner is characteristic of recently evolved animals, even at birth.

Thus far we have considered the evolution of structure and function which is suited to the needs of invertebrate life. The nervous system

has been occupied chiefly with the coördination and regulation of cells and structures for the purpose of self preservation and reproduction. Among vertebrates, however, we observe a greater need for means of communication with the environment. There must also be a greater capacity for adjustment to the environment than is possible with the nervous system of the invertebrate. This is afforded by the cerebrospinal nervous system with its brain, spinal cord, nerves, intermediate ganglia and nerve endings for the transmission of impulses to and from the periphery of the body. The old segmented nervous system found in the invertebrates continues to develop and to attend to the involuntary functions within the body. The cerebrospinal system, on the other hand, develops coordinately with the evolution of vertebrate animals. It attends in general to voluntary functions governing the relations of the animal to its environment. for concentrating special sense organs in the head of the animal and the ever increasing contacts with the external world have resulted in an enormous development of the anterior portion of this nervous sys-The brain has thus been evolved in order to provide centers for the reception and assimilation of sensory stimuli and for the selection and coördination of proper motor responses as well as for the innumerable pathways for the transmission of nervous energy.

Comparative studies of the nervous systems of vertebrates afford many illustrations of this gradual evolution. Thus in the fish there is a rudimentary brain without a cerebral cortex; in frogs considerable development of the front portion of the brain, and a rudimentary cerebral cortex; and in birds a cerebellum and fairly well developed cerebrum, while in mammals the relative development of the cerebral cortex is enormous. In contrast to this striking growth of the brain there is only a very slight development of the spinal cord.

In harmony with this evolution of the cerebrospinal nervous system there are remarkably increased complexity and capacity of other structures. Fish have rudimentary eyes, semicircular canals for the purpose of maintaining equilibrium, a rudimentary sense of hearing in some species, and probably a fairly keen sense of smell. Frogs have greater visual capacities, and a moderately well developed sense of hearing. They live both on land and in water, and produce sounds by which they communicate with each other. Birds have an acute sense of hearing, can distinguish colors, and have unusual powers of locomotion. Mammals excel through a high development of the

special senses, the sense of smell in the lower mammals serving the purposes of the more highly developed senses of hearing and vision in human beings. These special senses greatly extend the distance through which contact with the surroundings may be maintained.

Likewise we find remarkable increases in the extent to which instinctive tendencies operate to attain ultimate fulfillment of the needs of the animal. This is well illustrated by the evolution of the parental instinct which is manifested in rudimentary form by invertebrate Some of the lower invertebrates merely lay eggs and have no further concern for the offspring. Certain more highly developed invertebrates instinctively select a place to deposit eggs where the conditions for reproduction are favorable. Some insects provide food for the young before they are hatched, but thereafter show practically no concern as to whether they live or die. Some fishes, toads and frogs watch the eggs, but are not interested in the offspring. Bees and ants attend to their young with unusual care. Certain kinds of fish swim about with their schools of small fry, protecting them valiantly against enemies for a few weeks. Later the young fish swim away and are no longer recognized by their parents. Almost all birds sit upon their eggs until they are hatched, and then feed, clean and protect the young. Although the duration of parental care gradually increases in higher animals, human beings alone maintain an interest in their offspring throughout life.

The development of the parental instinct permits some interesting conclusions. These may be expressed briefly as follows: the less concerned the parents are in the offspring, the more capable are the latter of living independently at birth and the greater is the number of offspring necessary to preserve the species; the greater the parental care, the more highly developed are the rudiments of those feelings, emotions, sentiments and strivings which in man are largely altruistic in nature. It seems that the development of the parental instinct is directly responsible for the evolution of the altruistic feelings and tendencies so characteristic of social life among the most highly developed animals.

It is probable then that the tendency of mammals to live in organized groups or societies was a natural outgrowth of family life among the higher animals with its parental guardianship during the period of dependence. It is also probable that in the beginnings of community life the feeling of need for companionship was largely

selfish. Later, when struggles against enemies resulted in sacrifice of certain members of the group it is likely that unselfish impulses and feelings of sympathy appeared. However this may be, it is obvious that the struggle for existence is more effective and less difficult in proportion to the extent to which animals live in organized societies. It has been observed that rabbits stamp on the ground with their hind feet to warn the group of danger, that birds and some mammals post sentinels, and that monkeys utter cries indicating safety or danger. Likewise bull bisons in the presence of danger drive the cows and calves into the middle of the herd and defend the outside, and monkeys adopt orphan monkeys. Thus in the study of social life among animals it becomes evident that members of the group who are interested in mutual welfare are more likely to survive, while those inclined to live solitary lives fail to obtain the protection and other benefits afforded by group life and are therefore more likely to perish.

When an attempt is made to determine the beginnings of emotions even greater difficulty is met than was encountered with instincts. There seems moreover to be no general agreement as to just what an emotion is. Recent studies suggest that complex physiological processes accompany the expression or inhibition of different instinctive tendencies to action. To the extent to which a person is sensitive to these physiological processes he has complex feelings called emotions. Emotions apparently serve the purpose of increasing the strength and duration of instinctive tendencies. Pleasurable emotions greatly facilitate all normal bodily processes. Even the recollection of delightful experiences tends to activate vegetative functions. Emotions are an expression of a highly elaborated organization involved in instinctive activity. It has been demonstrated that such powerful and fundamental feelings as fear and rage are accompanied by inhibition of digestive and reproductive functions, increased adrenin secretion, mobilization of sugar in the blood, increased heart and lung action, and transfer of blood from the abdominal viscera to the cerebrospinal nervous system and the voluntary muscles. In other words, situations arousing such emotions cause prompt changes in the physiological processes of the animal through which it is quickly prepared to make a supreme effort for self preservation.

Among other general characteristics the higher vertebrates possess

the ability to learn, to communicate with other members of their own species, to modify instinctive reactions and to prepare themselves while still under parental care for the struggles of adult life. The process of learning, however, is confined chiefly to the trial and error method. When a new situation is encountered many different trials are made until a satisfying response is found. When the same situation recurs, association may aid in making the correct solution a routine mode of procedure. The ability to modify instinctive reactions is in direct proportion to the ability to learn new methods of adaptation. Most vertebrates have some rudimentary means of communicating with members of their own species, by means of sounds, behavior, contact or odor. Those variations from purely instinctive behavior which result in pleasure to the animal tend to be repeated and become habitual, while those which result in pain or discomfort are gradually avoided. In somewhat modified form the playful activities of the young become the more serious activities of adult life.

Thus in a very cursory way the evolution of structure and function in animal life approximately to that degree of development found in the human being at birth has been traced. In doing this an evolution which is coördinate with human embryonic development has been reviewed and it has been noted that the human being has incorporated within itself most of the structural and functional equipment of the lower animals. Since our lives begin with the union of two cells which in themselves appear to be no more complex than protozea, and since from that union there develop structure and potential function far beyond that found in lower animal life, we can only marvel at the regularity with which human beings enter the world apparently normal.

It will now serve our purposes best to refer briefly to the equipment which the human being has at birth. Although we are interested in the individual as a whole, our attention is directed to the nervous system because it is more closely associated than other structures with the total functioning of the individual.

At birth a well developed segmented nervous system somewhat analogous to the primitive segmented nervous system of the higher invertebrates is found. It is composed of a double series of ganglia which communicate with the spinal cord of the cerebrospinal nervous system and with the viscera and all other involuntary structures through intermediate groups of ganglia. According to its function it

is divisible into three parts. The upper part, or cranial portion, is composed largely of the vagus nerve with its branches. This part is commonly called the cranial autonomic division, and it is involved chiefly with the nutrition of the individual and in the regulation of the cardio-respiratory systems. The middle portion associated with the series of ganglia in the thoracic-lumbar region is called the sympathetic division and its principal function is the preservation of the individual especially when there is any threat to life. The lower portion in turn is associated with the series of ganglia in the sacral region and is called the sacral autonomic division. It is concerned chiefly with reproductive functions, with the preservation of the race. The cranial and sacral divisions are now included in what is called the parasympathetic system. These three divisions constitute a relatively primitive nervous system commonly referred to as the vegetative nervous system. Its functions are most fundamental and with the exception of the sacral autonomic division they are entirely This primitive nervous system is intimately associated with all of the ductless glands. It is directly connected also with those physiological changes which accompany the various personality disorders.

Although this system automatically takes care of digestive, cardio vascular, respiratory, renal and other involuntary functions within the body in a wonderfully efficient manner it is quite inadequate to cope with the relationships of the individual to his environment. meet this inadequacy the cerebrospinal nervous system has gradually been evolved. By means of the brain, the spinal cord and their associated nerves it attends to reflex and voluntary functions and acts as a means of communication with the external world. At all times it exerts a regulative influence upon the vegetative functions. medulla oblongata contains vital centers for the regulation of the heart action, respiration, temperature and other functions necessary for life. In addition it regulates the mechanics of certain activities in the oral region. Among these are coughing, sneezing, sucking, swallowing and vomiting. Its functions are supplemented by those of the pons which controls eye movements and participates in the facial expression and the modification of voice sounds.

These structures are little more than an expansion and prolongation of the spinal cord and they form a large part of what is called the brain stem. It is in this region that most of the cranial nerves have their origin. Through them the voluntary functions of the head are

controlled and impulses from the organs of the special senses are received.

In the base of the brain and at the anterior end of the brain stem are found the basal ganglia. These structures are of particular interest because their functions are readily associated with personality disorders. The optic thalamus correlates sensory impulses and also generates a current of feeling which pervades all mental functions and colors them with pleasure or pain. The globus pallidus governs simple, rhythmical movements and makes possible the flexibility and gracefulness of the body movements of higher animals. An equally important function is served by the neostriatum through which simple rhythmical movements may be interrupted and postures may be maintained.

The function of the cerebellum does not enter much into a consideration of personality disorders. Through its connections with other parts of the nervous system it is concerned with habitual behavior. In general it may be said that the cerebellum regulates the motor pattern of an act while the cerebrum determines its purpose.

The cerebrum, especially its cortex, attends to all of the highest functions characteristic of human beings. It contains the highest centers for the special senses as well as for general motor and sensory functions. It is through the function of the cerebral cortex that our superior intelligence is manifested and our personality characteristics are elaborated. Little is known about the specific function of certain parts of the cerebrum but some general observations have been fairly well established. The parietal lobe takes care of the final discrimination of bodily sensations, including touch, pain and temperature sensations, the postural relations of the body, and the ability to identify objects placed in the hand. The temporal lobe is associated chiefly with higher elaborations of auditory functions. Visual phenomena have long been associated with functions of the occipital lobe, especially the region of the calcarine fissure where the simpler impressions of color, size, form, illumination, transparency, distance and motion are synthesized. In the frontal lobe takes place the final correlation and synthesis of all sensory impressions together with the selection and discharge of appropriate motor responses. Its development has been coördinate with the growth of intelligence and of the capacity to participate in cultural achievements.1

<sup>&</sup>lt;sup>1</sup> For a more detailed discussion of the function of the brain see the author's Essentials of Psychopathology, Chapter III.

In spite of a very intricate structural equipment the human being at birth is the most helpless of all animals and could not possibly survive if it were not for parental care. The dependence is so great that it continues with most of us for two decades and with some for considerably longer periods. This is inevitable not simply because so much time is required for physical growth and mental development but also because the world into which we are born is infinitely complex in its relationships. To meet this complexity there must be enormous intellectual development as well as training in the expression, modification, or sublimation of instinctive and emotional tendencies which are so vital in making adaptations to the complex social life of the adult.

In general, it may be said that a person is born with an instinctive tendency to self preservation, and that very early in life the rudiments of an urge for the preservation of the species and the feeling of need for social contact appear. Self preservation is obviously of primary importance and when a person feels in grave danger the sympathetic division of his vegetative nervous system inhibits all bodily activities which are unessential and accelerates those functions which are most urgently needed. At other times self preservation is maintained through nutritive processes governed by the action of the cranial autonomic division on the digestive organs. The desire for preservation of the species is not fully realized until after puberty, when the sex functions become physiologically mature. In some individuals psychosexual development is arrested and does not progress beyond masturbation or homosexuality. In the lower animals mating takes place almost automatically but in human beings the choice as to the manner and degree of sex expression is so great that social, religious and moral laws and customs have been established to control its manifestations. The potency of the sex urge causes frequent transgressions and the consequent sense of guilt or conflicts with their associated feelings of chagrin, self reproach, disgust, and anxiety.

The sexual urge usually leads to the selection of a suitable mate, the establishment of a home and the creation of a new family. This entails mutual tolerance and sacrifice of selfish interests as well as the growth of mutual sympathies and feelings of responsibility. It may, therefore, be a potent agent in the development of social and altruistic feelings. Mutual dependence even in rudimentary form

greatly increases the efficiency of the bees. In the higher animals it is necessary for survival. With human beings mutual dependence especially in urban life has interfered with the development of individual resources to such an extent that few persons could maintain themselves unaided.

With this highly elaborated structural equipment and the potentialities already outlined the infant starts on a long period of training during which innumerable personality characteristics appear. During infancy attention is directed to the essential physiological processes of sleep, nutrition and elimination so that regular habits may be established. Very soon training in walking and talking is begun. In childhood and youth there are established between members of the family certain emotional relationships which may in large part determine the person's interests and activities throughout life. Much effort is made to acquire a knowledge of ordinary experiences through the functioning of the special senses. Formal school training is concerned largely with intellectual development. Meanwhile in an unsystematic manner the elementary desires and impulses are gradually modified to harmonize with social requirements. A great variety of instinctive and emotional tendencies appear and undergo modification, gain potency or are absorbed, depending upon their usefulness to the individual. Much of the learning in the beginning is by the same trial and error method observed in the higher animals. but in youth a great deal is learned through play and imitation. play of youth consists of much more general motor activity, greater alertness to sensory stimuli, and freer expression of feelings than is possible in later life. In many ways the running, jumping, climbing, hiding, hunting, shouting and fighting of boys are similar to the behavior of monkeys or uncivilized people. Girls behave in a similar manner but they are more inclined to be interested in dolls and domestic affairs. Imagination is never more lively, and the capacity to differentiate clearly between the real and fancied and between truth and falsehood is acquired only after years of experience. The eagerness of children to imitate and to obtain the approval of older people is striking. It would seem that they were passing through a stage of development analogous to that seen in primitive people, while at the same time they are preparing themselves by means of imitation and play for the serious responsibilities of later life.

As puberty is approached the increasing manifestations of the

sexual urge add to the concern of parents and other responsible persons. Often there are indications of impending conflicts which may prove intolerable. Boys and girls experience a variety of complex emotions, such as admiration, awe, reverence, jealousy, shame and bashfulness. They have reached a degree of intellectual development where they begin to think more in terms of abstract ideas, and to determine the relationship of cause and effect without actual physical demonstration. They are also gradually becoming impressed with the responsibilities of life.

During the period of adolescence there is frequent conflict between personal desire and social requirements. The sexual desire is usually most urgent, while religious and moral training, personal standards of virtue, and the admonition and anxiety of parents inhibit its expression. On this account and also because there are definite physiological readjustments accompanying sexual maturity, it is a period of great stress and turmoil. Boys are prone to demonstrate their virility and to seek feminine admiration by engaging in games and sports requiring physical strength, endurance and courage. Girls become interested in social functions, pretty clothing and such means of self display as will elicit the affections of boys. Both sexes show the beginnings of the tendency to live the independent lives of adults by disregarding and even resenting parental advice and restriction and by an unwarranted confidence in their abilities to attend to their own affairs. It is a period when many ideals are approached with the greatest enthusiasm, when action is impulsive and ill-considered, and when a great deal of experimentation goes on preliminary to the selection of a suitable mate, a vocation, or both. Instinctive and emotional tendencies have continued to develop and have become increasingly complex in their manifestations and relationships. Abstract ideas constitute to a greater extent the material of thought processes. General intellectual capacities often reach their greatest height. Probably at no other period does originality of thought and action obtain freer expression. Organized systems of emotional tendencies become centered about ideas or objects. In other words, there is an expression of sentiments, such as love, hatred, sympathy and respect.

Appreciation of the responsibilities of life, and the ever increasing need of sacrificing purely selfish interests for the good of the family and community gradually terminate the preparation of the adolescent for adult life. Parental advice and assistance are received more kindly, but at the same time self respect, self confidence and a genuine desire to be independent or even helpful stimulate strivings and produce accomplishments which render negligible the feeling of need for parental care. In marked contrast, however, to the feeble domestic ties of the lower animals, the strong emotional relationship between children and parents seldom disappears.

Having reached a stage in development where parental care is no longer really necessary, the average healthy young adult becomes interested in the establishment of an independent home life. Marriage and parenthood are sought, and thus social relationships and responsibilities are created which give opportunity for further emotional development. Opportunity is given also for self discipline in the sacrifice of selfish interests and for the cultivation of tender and genuinely altruistic emotions and sentiments which are so essential to people who would live harmoniously together. This experience may result in a genuine feeling of sympathy and responsibility not only for the welfare of the immediate family, but also for that of larger groups, the community, the nation, or even the world. This feeling of altruism is fostered by active membership in various social, political and religious organizations where group interests have precedence over those of individuals.

In order to obtain this degree of independence, responsibility and altruism the average person has to supplement general intellectual training with specialization in some field of endeavor which is of value to an organized community. Proportional to the extent of this specialization, there is limitation of general intellectual capacities and interests. In other words, an individual who conscientiously devotes his life to the pursuit of some definite work necessarily has a comparatively narrow life even though one of great value to society.

Actual contact with the realities of life causes reflection upon experiences of the past and a modification of the interests and pleasures of the present in accordance with the needs of the future. In this way are formed the habits of establishing relationships between various experiences which suggest more advantageous courses of action than are possible by the trial and error or imitation methods of childhood. In short, reasoning is used to a greater extent. In spite of the pride with which the average adult regards his reasoning capacity, the truth is that reason plays a minor part in determining

the course of our lives. Attitude and conduct are much more frequently determined by personal comforts and pleasures, interests in material welfare, imitation of the socially prominent, sacrifice of ideals to social popularity, superstititous beliefs, petty jealousies or fads, or even by feelings that the rights of personal liberty must be emphasized through self indulgence. Only a few superior persons are able to profit continuously by experience and especially by the experience of others. They conserve or expend their resources for ultimate gain and at the same time enjoy the legitimate pleasures of life. They are governed in daily conduct by high ideals and principles without being misled by the praise or blame of the social environment.

As one grows older, gradual fixation of habits limits adaptability. Expertness in technique, social or otherwise, greater experience and judgment more than compensate for the enthusiasm, initiative and vigor of youth. Trials, successes and failures have mellowed or embittered us according to the individual capacity to accept the inevitable compromises between early ambitions and actual accomplishments.

Middle age should find a person at the height of his usefulness to society. Efficiency may be impaired for a period due to the unrest and readjustment associated with the decline of the sex function. As a rule habits have become so fixed that radical changes are made with great difficulty. Wealth of experience, wisdom, achievement and social prominence require the assumption of great social responsibilities and should be sufficient to command the respect and service of others.

As old age approaches it finds us reluctant to relinquish these responsibilities and with an increasing tendency to judge the present only in terms of the past. Altruistic interests become limited, selfish interests increase, and finally there is a return to a condition of dependence.

#### PSYCHOANALYTIC FORMULATIONS

With the extension of psychoanalysis in the field of psychiatry it has become necessary to have some knowledge of psychoanalytic terminology and theory. Freud's conception of a personality is in many respects similar to what has been presented above but his language is quite different and his formulations are dependent in large part upon theory. He is concerned almost entirely with psychological phenomena and more particularly with the unconscious life. By the unconscious<sup>2</sup> is meant essentially the instinctive and emotional component of the individual. It is constantly active, infantile in its nature and origin, timeless, illogical, unmoral, predominantly sexual, and isolated from reality.<sup>3</sup>

The unconscious has retained mental processes which were characteristic of the earliest stages of human development. It is constantly striving for pleasure at any cost and always shrinks from discomfort or pain. In other words the unconscious is characterized by mental processes which are egocentric and selfish. Its goal is pleasure and these processes are therefore said to be governed by the pleasure principle.

The individual cannot be oblivious of the external world and since he is constantly driven by the demands of his unconscious some adaptation to the environment must be made. That part of mental functioning engaged in making this adjustment is governed in its action by what is known as the reality principle, a principle of mental functioning which deals with reality even though this is unpleasant.<sup>4</sup> Through its action the gratification of desire is postponed and may be attended with pain, and the road to pleasure is often long and circuitous.<sup>5</sup> The extent to which the pleasure principle has been modified before its cravings are gratified is one of the chief subjects of psychoanalytic investigation.<sup>6</sup>

Important additions to these very general conceptions regarding mental life have been made by Freud on the basis of three personality components—the id, the ego, and the super-ego. The id consists essentially of the fundamental strivings of the unconscious and particularly those which the person or the ego does not recognize. Whenever the id is granted liberties the ego becomes liable to punishment by the super-ego, or that part of an individual which is usually referred to as his conscience. The super-ego is said to have originated

<sup>&</sup>lt;sup>2</sup> Freud, S.: Collected Papers, London, 1924–25, Vol. IV, pp. 25, 119.

<sup>&</sup>lt;sup>3</sup> Jones, Ernest: Papers on Psychoanalysis, London, 1923, pp. 147–151.

<sup>&</sup>lt;sup>4</sup> Freud, S.: Op. cit., p. 14.

<sup>&</sup>lt;sup>5</sup> Freud, S.: Beyond the Pleasure Principle, London, 1922, p. 5.

<sup>&</sup>lt;sup>6</sup> Jones, Ernest: Op. cit., p. 4.

through the incorporation within the ego of the earliest objects of affection, the parents. In reality it is the ideals suggested by the parents which become engrafted upon the individual and constitute the standard by which all acts of the ego are judged.<sup>7</sup>

In psychoanalytic literature one of the most frequent terms used is libido. In its more liberal usage the term libido is synonymous with human energy. Occasionally that form of energy which is utilized in procuring food is called the nutritive libido. At all other times the term libido represents the energy associated with loving and particularly with that which has sexual union as its aim.<sup>8</sup> This libidinous energy may also be manifested in the form of self love, or as love for parents or children or for members of the same sex, or in the form of devotion to objects or ideas. The chief source of the libido is therefore the id and the libidinous desires of the unconscious seek gratification as far as possible in accordance with the pleasure principle.

Psychoanalytic investigations have tended to show that the libido is active in its manifestations even in infancy. In 1879 Lindner claimed that during the act of sucking children became pleasurably excited to the extent of orgasm after which they fell asleep. He concluded from this that the sucking of a child had a sexual element. Freud not only accepted this viewpoint but went on to establish the characteristics of infantile sexuality. He found that the sexual pleasure of the infant was purely selfish or autoerotic and that stimulation of the mucous membrane of the lips was the chief source of this pleasure. From this beginning the mouth became known as an erotogenic zone, a part of the body through which one is easily aroused sexually and which participates in libidinous or sexual relationships.<sup>9</sup>

In like manner the characteristics of the different stages of libidinal organization, the stages in sexual development, have been outlined. At the same time note has been made of the corresponding stages of object love, the object toward which sexual desire is directed. These stages in the order of their development may be presented briefly as follows:

<sup>&</sup>lt;sup>7</sup> Freud, S.: Collected Papers, London, 1924–25, Vol. II, pp. 254, 264.

<sup>&</sup>lt;sup>8</sup> Freud, S.: Group Psychology and the Analysis of the Ego, London, 1922, pp. 37, 38.

<sup>9</sup> Abraham, Karl: Selected Papers, London, 1927, p. 249.

Stages of Libidinal Organization
Oral Stage

Stages of Object Love

Early (sucking)
Late (cannibalistic)

Auto-erotism (without object)
Narcissism (total incorporation of

object)

Anal-sadistic Stage

Early

Partial love with incorporation of

Partial love

Late

Genital Stage

Early (phallic)

Object-love with exclusion of gen-

Object-love

Final

From this outline it may be gathered that the sucking stage is the earliest in sexual development and that the final genital stage is that attained by only the most mature individuals. During the earliest stage there is no external object toward which sexual desire is directed and in the final genital stage the feeling of sexual desire for a loved one is greatest. It may be surmised also that this final stage is seldom fully realized and that more often the sexual development is at least partially arrested at some intermediate stage.

At the late oral or cannibalistic stage teeth have erupted and the infant is inclined to bite the mother's breast. At this time feelings of anxiety associated with the weaning process appear and a desire to retain the nipple by devouring it.

It is stated that the infant not only regards his excrement as being a part of himself but that the pleasure associated with defecation is heightened by delaying the process. When the time arrives for the regulation of excretory processes in the interest of personal cleanliness the infant often develops hostile feelings against those who insist upon it. During this period of special attention to excretory processes the infant is said to be passing through the anal stage in his sexual development. The hostility which he may feel towards parents or others who curtail his freedom in defecation and depreciate the value of the excrement gives rise to what is known as sadism, an erotic desire to injure others.

Thus far in the sexual development the individual is said to be merely active or passive in his attitude without specific genital interests. With the passing of the oral and the anal stages, the pregenital stages, the child begins to enter upon the genital stage, in which a person of the opposite sex is normally selected as a love-object. The transition is gradual and some time elapses before there is specific attraction for the genitals of the loved one.<sup>10</sup>

Even with the attainment of the final stage of sexual development in which the interests of the individual and of society coincide a tendency to revert to earlier sources of pleasure survives and under conditions of unusual stress a person is prone to seek gratification again at the anal and oral stages. Many people never become emancipated from these infantile sources of gratification and are said to have a libidinous fixation at the oral or anal level. Such a fixation makes an adaptation at the genital level difficult if not impossible.

According to the extent to which a person may have lingered at some immature stage in sexual development certain of his character traits are more prominent. If he has been fully gratified at the breast he is likely to be bright, sociable, optimistic and generous. He has an unusual urge to talk and gives the impression that his fund of knowledge is inexhaustible. His infantile pleasure in sucking may survive in a marked curiosity or even in a special predilection for scientific investigation. On the other hand if he has been deprived of full gratification in the sucking period he is likely to be impatient, aggressive, envious and hostile in his attitude toward other people.<sup>11</sup>

When the libidinous fixation at the anal stage has been pronounced the character traits are an outgrowth of this period of development. Such a fixation is said to cause a person to be exceptionally orderly, parsimonious and obstinate. He may be unusually neat in his personal appearance, reliable and conscientious, or the opposite—careless in his habits, procrastinating and negligent of his duties. When these traits are more pronounced he may be morose, inaccessible and reticent or greedy, irascible, vindictive and defiant. In more sublimated form his impulses may be expressed in pedantry, modeling, painting, or in unusual business ability.<sup>12</sup>

In the final stage of sexual development there are traces of the preceding stages but only those traits have survived which are conducive to harmonious relations between the individual and his environment. From the oral stage it is said that the mature person

<sup>&</sup>lt;sup>10</sup> Abraham, Karl: Selected Papers, London, 1927, Chap. XXVI.

<sup>&</sup>lt;sup>11</sup> Abraham, Karl: Op. cit., Chap. XXIV.

<sup>&</sup>lt;sup>12</sup> Freud, S.: Collected Papers, London, 1924–25, Vol. II.

has developed enterprise and a liberal supply of energy and from the anal stage he has acquired endurance and perseverance.<sup>13</sup>

Additional formulations have been necessary to describe the stage of sexual development through which one must pass before he can fully enjoy the love relationships of the mature adult. These formulations deal more particularly with the relationship of the individual to the object arousing his affections. In the beginning the libidinous cravings seem to be gratified through the infant's own body which at this time constitutes the loved object. During this phase the child is said to be autoerotic. In the next stage of narcissism the child has not yet been able to distinguish between its own body and external objects and the mother's breast is used entirely for selfish purposes.

With the loss of this source of pleasure through weaning the child begins to direct its attention toward external objects and it must find other means of stimulating its erotogenic zones. There ensues a latency period (ages 4 to 11) during which libidinous desires are directed chiefly towards the parents and autoerotic activities begin to be associated with fantasies of sexual gratification through the parent of the opposite sex. The affectionate bond between the mother and son and between father and daughter becomes most pronounced at this time. The son even has unconscious desires to replace his father in the affections of the mother and likewise the daughter wishes to replace the mother. Such a libidinous relationship between a mother and son or father and daughter is commonly referred to as the Oedipus complex.<sup>14</sup> By the term complex is meant a group of ideas which have been partially or completely repressed in the unconscious because of their painful emotional associations.<sup>15</sup>

Along with the unconscious desires for sexual gratification through the parent of the opposite sex are conscious desires for physical intimacies, such as kissing, caressing, sleeping with the parents and other forms of bodily contact. While this kind of a love relationship is in progress there may develop envious, hostile feelings toward

<sup>&</sup>lt;sup>13</sup> Abraham, Karl: Op. cit., Chap. XXV.

<sup>&</sup>lt;sup>14</sup> According to Greek legend Oedipus, deserted by his parents in infancy and reared by foster parents, killed his own father and fell in love with his mother without knowing that they were his real parents.

<sup>&</sup>lt;sup>15</sup> Freud, S.: Collected Papers, London, 1924–25, Vol. II, pp. 47, 188.

the parent of the same sex and there may even be unconscious desires to mutilate or kill this parent.

With the more definite localization of sexual feeling in the genital region the individual becomes more aware of the nature of these hostile feelings and of the incestuous desires. This contributes to a sense of guilt which is manifested somewhat differently according to the sex. The son develops a fear that he will be chastised by his father. As punishment for sexual transgressions he may even fear that his penis will be cut off. At this stage in his sexual development the boy is said to have a castration complex.

There is some difference of opinion regarding the sexual development of the girl at this stage. It has been assumed, however, that the discovery of sexual differences causes the girl to become envious of boys and to believe that she has been castrated. On the other hand this discovery by the boy increases his castration fears. There is said to be a "passing of the Oedipus complex" in boys with the development of the castration complex and in girls with the development of a sense of guilt arising from incestuous desires for the father.

Many persons retain traces of libidinous fixations at these earlier stages in sexual development<sup>17</sup> but the futility of incestuous desires, the castration fears, the sense of guilt and the desire for social approval impel the growing youth to seek a mate with whom affectionate desires may at last be gratified. Both the incestuous desires and the hostile feelings tend to become repressed and harmonious relationships with the parents are established. Unfortunately such a happy solution of conflicts arising from libidinous strivings is somewhat idealistic and many people pass through life with little more than a glimpse of this goal.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> Freud, S.: Op. cit., pp. 166, 184, 188, 244-248, 271-275.

Freud, S.: Three Contributions to the Theory of Sex, N. Y., 1930, pp. 54, 55.

<sup>17</sup> Alexander, F.: The castration complex in the formation of character, Internat. Jour. Psycho-analysis, 4:11.

<sup>&</sup>lt;sup>18</sup> Healy, William et al.: The Structure and Meaning of Psychoanalysis, 1930, pp. 100–165.

## CHAPTER II

# PERSONALITY DISORDER

In the previous chapter an attempt was made to outline briefly the development of the average human personality. It became apparent that the human being is not only a result of gradual evolution, but is also a highly organized composite of much that was observed in the structure and function of lower animals. We have found structure varying from the most rudimentary individual cells to infinitely complex organs, and function evolving from rudimentary chemical and physical processes to the most intricate psychological relationships between the individual and the environment.

Considering the long period and the complexity of development necessary for us to become mature adults, it is not surprising that some of us should fail in a conspicuous way. In fact, each of us is unevenly developed. This is due in part to the differences in our inherited capacities to develop and in part to the opportunities we have had for development. In some respects we are all inferior to the ideal normal, or rather, to the theoretical average of the general population, while in other respects we are all superior.

Those of us who are conspicuously limited in our capacities to develop are regarded as being constitutionally inferior, while those who have unusual capacities for development are constitutionally superior. Whether native talents are developed depends considerably upon opportunity and to some extent upon individual choice. In some people there is marked unevenness of development, or a failure to develop adequately certain groups of characteristics. Thus there arises conflict within the personality as well as between the personality and the environment. In some individuals this conflict results in what is called a personality disorder.

The seriousness of such a disorder may be judged in part by means of the general principle that the more primitive and elementary the structure or function the greater is the resistance to alteration or destruction, while the more highly developed the structure or function, the more readily it can be altered or destroyed. In the human body primitive cells are readily reproduced in case of destruction but highly developed cells such as nerve cells do not have this power. Reflexes likewise are only slightly altered and are never destroyed in functional disorders, while the more complex emotions and the capacity to reason correctly are comparatively very unstable. On occasions of great danger or hazard we find that one is more likely to be interested in self preservation than to be occupied with the welfare of others. This is the result of the dominant action of the drive for self preservation which is more primitive and more powerful than the social and altruistic tendencies.

In actual life, on account of the unequal strength of inherited tendencies and the varying opportunities for development there arise frequent disharmonies because the forces governing self preservation and race preservation (more simply the sex drive) are in conflict with the social and altruistic tendencies. The conflict is due largely to the fact that civilization has created many obstacles to the natural development and expression of the sexual drive. The extent to which one can survive the struggles between these fundamental desires until a socially acceptable solution or compromise is reached constitutes an index of personality stability.

The problem of the interaction of hereditary and environmental factors remains unsolved because of the interdependence of these factors. A person not only inherits potentialities by way of the germ plasm but also through the environment created by his antecedents. It seems obvious that both heredity and environment are important factors in illness and that one or the other may be dominant according to circumstances. If there are a number of unstable individuals in a family who have the same type of illness it may be assumed that the tendency toward this illness is carried in the germ plasm. Nevertheless each member of the family is influenced in his development by emotional relationships and the influence of an unstable relative who has continuous personal contact may be just as great as that of another who must now and then receive institutional treatment.<sup>1</sup>

Under ideal circumstances only healthy, well adjusted young adults who are madly in love with each other would be mated and because of this love they would wish to perpetuate themselves in their children. Even though each of the parents belonged to stable families

<sup>&</sup>lt;sup>1</sup> See Chapter I in the author's Essentials of Psychopathology.

it might be unwise to procreate if the prevailing personality characteristics of these families were likely to clash in case these characteristics appeared in combination in the offspring. Conception would be the result of deliberate choice and with due regard for parental health and economic circumstances. The personal habits of the parents would be adjusted accordingly. For instance the mother would abstain from drinking for some time before impregnation and throughout pregnancy and while nursing her child. The same blood that courses through her veins also nourishes the unborn child and she would not of course include alcohol in the diet of her baby.

The influence of the mother's health or dissipation upon the unborn child cannot be very well determined experimentally because of the many factors involved. At the time of conception fundamental characteristics in the offspring are determined by the combination of genes which enter into the new organism. Subsequently there is also a constant interaction between the genes and the surrounding cytoplasm and each cell responds to the conditions of the medium in which it lives. It is known that the mother transmits to her infant certain immunities to disease and it is very likely that the mother adds much to the infant's chances of normal development if she has proper food, rest, and exercise and is relieved as much as possible of anxiety. The direct physiological response to the mother's emotional attitude and mode of living is suggested by the present small proportion of well educated women whose lactation is adequate. Anxiety not only diminishes the amount of milk secreted but it probably also modifies the physiochemical composition of the milk.

Because of the helplessness and impressionability of the child it might appear that his career was practically determined by his inheritance and his early environment but the child himself is a very active agent. He accepts whatever gives him pleasure and rebels against interference with his activities. His own personality thus becomes an important factor in modifying environmental conditions. The variability and complexity of these factors in health and illness make it impossible to predict with certainty personality characteristics which may develop.

On the other hand it is evident that within the first year of life traits have appeared which distinguish any given infant from all other infants. He has his own way of discovering the interesting parts of his body and of testing anything which comes to his attention. He is soon aware of the emotional attitudes of the persons who care for his needs and he becomes attached to those who give him pleasure. His own feelings are stirred through intimate physical contacts, through smiles and the quality of the voice long before anything is conveyed by language as such. Almost every stimulus is a part of a new experience and growth is exceedingly rapid. He feels free to give expression to any impulse or satisfy any desire and he protests vigorously against any interference.

The first child is likely to suffer from the inexperience and anxiety of the parents especially if the child was not wanted. As a rule an underlying hostility is manifested in morbid solicitude for the child but it may appear more directly in neglect and cruelty. The child always responds with his own anxiety, undue submission or rebellion. Almost all parents have a decided preference as to the sex of the child and few can adjust to disappointment. The mother or father is inclined to rear the boy as a girl or vice versa to mitigate the disappointment. The resulting conflicts may be important factors in later adaptation. Acceptance of the inversion by the growing child may lead to homosexuality while repression may be a factor in the development of a personality disorder.

Whatever the setting may be into which the child is born the uncertainties of an independent existence increase as the years pass. Birth itself cannot be a pleasant experience and the first cry is an expression of air hunger. Thereafter nothing leads more quickly to a state of anxiety than any interference with breathing. Inadequate nourishment also leads to unrest and anxiety but the excellent care which most infants now receive undoubtedly adds much to their feeling of security. Hunger is a recurrent experience, however, even though the food is adequate.

Physical illnesses always leave their impressions even though the general health is only temporarily impaired. The acquired immunity to the contagious diseases may be small compensation for the risks which have to be taken. Not only must the interference with growth and nutrition be considered but the general atmosphere of the home while the child is sick. A series of physical illnesses is a great handicap in the competition with the more sturdy. The insecure and aggressive child may struggle desperately to keep up with others, the less aggressive may follow a course which eventually leads to in-

validism. If illness is a preferred topic of conversation in the home the child soon learns that sickness makes him the center of attention.

Difficulties in adjustment often are evident or can be anticipated early in life. Sometimes the home atmosphere is such that the child's development is certain to be distorted. Occasionally a child appears to be so predisposed to some form of maladaptation that difficulties arise even in an ideal environment. These vague general principles are not of much assistance in dealing with any particular child because of individual variations. The special needs of each person must be studied and the theoretically ideal environment may be found to be quite unsuitable to meet these needs.

If a child fails to develop normally some deficiency in the nervous system is usually suspected. As a matter of fact the digestive system is more directly related to problems of childhood. Few infants now receive adequate nourishment at the breast and supplementary feedings may be necessary from the beginning. The anxious mother is likely to try another formula or consult another physician on the slightest indication of digestive disturbance. She is intent upon having a certain amount of food ingested at regular intervals regardless of what might be necessary to satisfy the appetite. This may be the beginning of many years of conflict over diet. The fewer the children in the home the greater is the struggle over diet likely to be. It is a well known fact that these problems seldom arise in orphan asylums where the children are fed somewhat routinely as are hungry animals. Almost all children are served too much and feeding problems would appear less often if some of the food was kept in reserve.

Regularity in feeding is undoubtedly desirable and sufficient amount and variety must be provided to maintain normal growth and nutrition. The conditions under which the child eats are equally important. Fear, anger and quarreling lessen the appetite and interfere with digestion. The act of eating itself appears to be an important consideration in the normal development of the child. In the first years of life much pleasure is obtained from sucking movements and a few months after birth there is an equivalent interest in biting and chewing. The protests against weaning and the adoption of substitutes for the nipple indicate the need for oral activities. If the child is weaned too soon and is not given equivalent opportunity for sucking through artificial feedings he is more likely to resort to his

thumb or some other object. The deprivation may add to his insecurity and cause him to develop a resentful attitude. On the other hand if weaning is delayed and there is an abundant supply of nourishment the child may become too greatly attached to the sucking method of feeding.

The connection between the early feeding experiences and personality disorders is still difficult to trace but it is evident that oral interests continue throughout life and that contentment is dependent in large part upon healthy digestive processes. Clinical observation reveals a close relationship between disordered emotional states and digestive processes. The elated, overactive or tense patient has an unusual desire to be chewing or smoking (sucking) and eats a greater amount of food than is ordinarily required. All patients who are laboring with a painful emotional state have little appetite and complain of digestive disturbance. Fundamentally all persons are emotionally dependent and an abundance of food may symbolically represent the affectionate attention of a mother who once supplied all needs. In other words the early associations with eating and digestive processes are probably important determinants in emotional development.

Long before the eating habits are well established the mother directs attention to the processes of elimination. Until educated to the contrary the child does not differentiate between urine and other fluid which may be easily manipulated but as soon as toilet training begins urine and feces acquire personal value. The child's attention is called to the fact that he can do something which is of great interest to the mother. His self esteem is enhanced if he succeeds in pleasing the mother and he may experience much displeasure if he fails. The maternal anxiety regarding the food intake is certain to be extended to bowel movements. Ordinarily regular habits are established without much difficulty but if there is conflict between the mother and the child there is likely to be interference with normal physiological processes. The child then has a very effective means of expressing his dislikes and when disappointed or thwarted continues or reverts to the earlier untidy habits. Bed wetting may then serve a definite purpose for the child even though at the cost of ostracism and a feeling of insecurity.

Whatever the sleeping accommodations may be in the home the child becomes aware that the parents have something to do with

the birth of children. If he sleeps in the same room he is likely to witness scenes which arouse his curiosity and which may frighten him. As a rule the father appears to be the chief source of anxiety because of his size and strength and his aggressive attitude toward others.

By the time the child has discovered that stimulation of certain parts of his body gives rise to pleasurable sensations he has also become aware of the passionate relations of the parents. If by design or otherwise he witnesses their sexual activities he is confronted with many problems in addition to those which are strictly his own. The parents who rationalize their own exhibitionism under the guise of satisfying the child's curiosity fail to recognize that they alone may achieve satisfaction and that the child is merely excited without the experience and the physiological development necessary to adjust to adult activities. Equally undesirable results may come from undue secretiveness and embarrassment in regard to intimate personal affairs. In either case the child's attention is directed to feelings and activities which may seriously interfere with play and sleep.

Under ideal circumstances the parents would be so well adjusted that they would be guided by the child's inclinations, activities and experiences. They would make use of their own knowledge and experience only in so far as it was necessary to aid the child in solving his problems. Instead of this we find every conceivable emotional relationship between parent and child, with the parent trying to gratify his own desires and fulfill his own ambitions through the medium of the child.

Unhappy marriages result not only from the well recognized sources but also from the fact that few adults ever become sufficiently mature emotionally to be consistently guided by the needs of the mate. Harmonious adjustment to a person of the same age and opposite sex is the most difficult to achieve and maintain and almost all adults depend upon a substitute. They are never completely emancipated from their parents although rebellion against the parents is often mistaken for emancipation. They reproduce with a desire to perpetuate themselves and promptly include the child in their own problems.

The child requires affection, a sense of being protected and a feeling that his endeavors meet with approval. Friction between the parents means that he is puzzled, feels insecure and may be forced to align himself with the mother or father. Moreover, the chosen

parent responds in a positive way, seeking the affection which should come from the mate.

Whatever the sources of attachment or aversion between parent and child may be, an emotional attitude is quickly established in the child and since adults are rather inflexible this attitude is likely to be promoted. Ordinarily a son becomes more attached to his mother and a daughter to her father but there are many exceptions. Such attachments have no particular significance unless they are excessive and too persistent. During the most impressionable periods the parents represent the ideal and it is largely through social contact that disillusionment takes place. Marked aversion causes the child to seek a parent substitute in some other adult and undue attachment interferes with social contact.

Brothers and sisters and even domestic servants exert influences which may be as important as the parental in determining the course which any given child may follow. The first child resents being displaced by the second and the second may be harassed by the first as well as being displaced by the third. The youngest child always has the risk of being pampered as the baby. If there are servants it is likely that the child will spend more time with them than with the parents. Almost all servants tend to emphasize the parental inadequacies and establish liaisons which the parents may not even suspect.

Memories of early experiences are certain to fade but in the meantime emotional attitudes toward people become well established. In later years a person may rebel against all authority with little recognition that he is still rebelling against his stern father. Likewise a young man often seeks in his wife a mother substitute even though there is no obvious age discrepancy.

Very few children are so handicapped or so hard pressed by circumstances that they do not wish to continue with life's experiences. As a rule children are impatient to be grown up and enjoy the freedom which adults appear to have. At the same time they are emotionally dependent and inclined to flee from personal difficulties to a position of greater dependence. Each individual is striving to make some kind of adjustment between personal needs and the demands of reality and those who are unable to accept compromises manifest some form of personality disorder. The type of disorder manifested is dependent upon personal predisposition and the kind and amount

of stress to be met. The varieties of disorder presented are so great that any rigid classification is purely arbitrary.

As a rule the indications of the general pattern which a person is likely to follow may be observed early in life. Congenital deformities are usually serious handicaps especially if they interfere with locomotion or detract conspicuously from personal appearance. A person thus afflicted is likely to develop an exaggerated feeling of inferiority and may struggle excessively to compensate for the deficiency. Feeding difficulties, digestive disturbances and constipation may direct undue attention to diet, digestive functions and elimination and thus pave the way for functional disturbances which occupy so much of the attention of physicians.

Disturbances of sleep, fear of darkness, night terrors, bed wetting, somnambulism, nail biting and stammering are all indications of emotional instability and are commonly referred to as neurotic traits. They show a predisposition to disorders which later in life are recognized as psychoneurotic although they may be forerunners of other functional disturbances. They constitute evidence that personality adjustment already is failing and call for the attention of a physician especially trained to deal with the functional disorders of childhood.

Retarded or precocious intellectual development is likely to add to the problems of adjustment. If the retardation is marked the child may be shielded from competition through institutional life. If it is less obvious he may struggle along until repeated failure calls attention to his deficiencies. He may then be given special training to make use of his particular talents and thereby find a place for himself in society. He may not be amenable to such training, may adopt anti-social methods of living and drift into the delinquent and criminal groups. His deficient intelligence makes him an easy prey for the unscrupulous.

The precocious child excites the envy of his associates and excessive praise from older people. He usually is unable to compete with other children in their physical activities and disdainfully substitutes his accomplishments in school. He is inclined to seek the companionship of adults and if not occupied is likely to get into mischief. Unless he is endowed with an unusual ability to get along with people he will have to deal with ostracism. His precocity may interfere with general emotional development to such an extent that he will be

unable to adjust to other people and be compelled to find a means of escape in his own fancies. According to the extent to which he is able to correlate fancy with reality he may become a genius, an impractical dreamer, or a grossly disordered person with what is called a schizophrenic illness.

It is not unlikely that in recent years sexual maladjustment has been too much emphasized as a factor in personality disorder. There is scarcely any form of sexual activity in which all normal persons do not at some time participate. Stimulation of the body including the genitals must be expected in childhood. All children are exhibitionistic. If a young boy plays with girls he is called a sissy and a young girl must keep with her own sex to avoid being considered a tombov. Few escape homosexual attachments even though it may be as innocent as a school girl crush. It would appear therefore that the sexual experience itself is not so important in undermining a personality as the associated emotional reactions. Development of a sense of guilt is almost as inevitable as are disapproval, prohibition and punishment. The emotional reactions are as intense as is the desire to indulge. The sense of guilt arising from sexual misconduct is practically universal and although it is a most potent source of insecurity and pervades all fields of personal endeavor it may be a factor in the integration as well as the disorder of a personality.

Under normal conditions a person learns to sublimate and socialize immature sexual impulses and he accepts past misdeeds as a part of life's experience. The trend of civilization is against him and in the direction of postponement and frustration of mature heterosexual adjustment. Substitute activities are therefore more likely and in recent years autoerotic and homosexual adaptations have beer not only more common but more openly accepted than formerly. Habitual substitutive activities are likely to conflict with adult heterosexual relations and they must therefore meet with disapproval. All boys strive to be virile and all girls visualize themselves as adult women. A conflict over substitutive sexual activities is almost certain.

Masturbation at some period in life is practically universal and as a rule does not lead to special problems in adjustment. Greater conflict seems to arise from homosexual tendencies and still more from desire for incestuous relations. Each person must deal with these tendencies and desires even though he may not clearly recognize

them as personal problems. The intensity and duration of the conflict depends upon the extent to which predisposition and circumstance cause substitutive activities to become habitual and upon personal and social barriers to indulgence.

The apprehensions regarding the consequences of masturbation are so deeply rooted that none can escape them. If a person is conspicuously insecure he is likely to suspect that others can detect his habits by the appearance of his eyes, he will examine himself for evidence of weakness and he will be inclined to withdraw from the company of others. This secretiveness makes other sexual adjustments more difficult and consequently the person becomes more dependent upon his own body for pleasure.

Homosexual tendencies are seldom clearly recognized but they may be sufficiently strong to lead to overt relationships or to marked compensatory strivings against them. The overt homosexual usually feels that he is a victim of some inherent deficiency and that he is inferior to others but he may protest that society is unfair in not permitting him to follow his natural inclinations. If he is content to associate with people like himself he may be a fairly well adjusted individual but if his homosexual tendencies are abhorrent to him there may be a gradual disorganization of his personality. He is very likely to become apprehensive and suspicious that others are aware of his tendencies and that they make uncomplimentary references to him. He is then said to have developed ideas of self reference. He may become convinced that others dislike him and persecute him. Such a person is said to be paranoid. With further disorganization of his personality his apprehensions may be so great that it seems as though people are making very unpleasant comments upon him even when he can see no one around. Such a person is experiencing auditory illusions or hallucinations and he usually is suffering from a paranoid schizophrenic type of disorder.

Incestuous relations are more common than is generally suspected but the taboo against them is so strong that the desire is repressed early in childhood and the emotional reactions to any awareness of such tendencies is violent. Usually these tendencies are so repressed that they gain expression only in illness and in the form of accusing voices.

It is unnecessary here to try to call attention to the manifold and subtle factors in personality disorder. From what has already been

mentioned the reader may have gathered that a pattern of living is the result of hereditary tendencies and constitutional predispositions and the interaction of these with environmental stresses. Perhaps with the exception of identical twins no two persons can be exactly alike and the individual deviations from a theoretical normal must vary in kind and amount.

If a child is conspicuously resistant in conforming with the usual standards of conduct for his age he is said to present a behavior problem. If he continues to rebel through adolescence he may be regarded as a delinquent. If as an adult he fails to profit by experience, must have his personal desires promptly gratified and is emotionally incapable of adjusting to the usual social standards he may be called a psychopath. These are ways in which emotionally immature persons take advantage of others to gratify their whims. There is failure to establish and maintain the usual regard for reality but no real loss of contact with it.

If a person has been reared in an atmosphere of anxiety and tension and has been trained to closely inspect bodily processes or pay undue attention to physical complaints he may develop these tendencies to an abnormal degree in the form of a psychoneurosis. His anxiety may be concentrated on the part of his body in which a functional disorder appears or the anxiety may be repressed and only the physical manifestations of the disorder are evident. Sometimes the anxiety leads to the development of specific phobias or to compensatory rituals which give temporary relief. All of these psychoneurotic methods of adaptation leave the person in contact with reality but in a state of invalidism. The symptoms of the illness shield the person from facing underlying personal problems and they are often of such a nature as to arouse the sympathy of other persons. Not uncommonly they are a means of dominating others under the guise of ill health.

An even more effective means of avoiding responsibility is afforded through the development of psychoses. The deviations from the theoretical normal may not be any greater in degree than occurs in other general types of disorder but the relationship of the individual to the outside world is morbidly disturbed. Attitude, feeling, thinking and conduct are exaggerated until the person becomes a caricature of his former self. While he is ill he is incapable of comprehending the usual values of reality. His behavior is the result of a freer ex-

pression of his own impulses, his distorted impressions of himself and of the outside world.

The psychotic type of personality disorder may be chiefly an expression of intolerable personal conflicts with a background of family and constitutional predisposition and is a reaction often precipitated by external circumstances which are overwhelming to the person affected. A toxic psychosis may be elicited by any substance formed within or introduced into the body causing a general state of intoxication. An organic psychosis is dependent upon structural change within the brain but in both the toxic and organic psychoses the manifestations of illness reveal the underlying personality traits of the individual affected.

Disorders occurring during childhood are necessarily related to factors already mentioned and their manifestations are a reflection of immaturity. The psychopath continues to be emotionally immature regardless of his age but his deficiencies usually do not become conspicuous until after puberty. The psychoneurotic disorders may be fairly well established before puberty and their origin can be traced to emotional maladjustment in childhood. Occasionally a psychotic disorder is manifested before puberty but with the exception of the rare psychoses of childhood associated with disease of the brain they are peculiar to adult life.

It is evident therefore that the major portion of personality disorders are an expression of the inability to meet the increasing demands which society makes upon a person as he approaches adult life. He is not permitted to carry impulses into action and even his desires are modified by his conscience. The more highly organized is the society in which he lives the less he is able to indulge in selfish pleasures. At the same time he is expected to give up autoerotic practices and to repress homosexual desires and instead obtain satisfaction from adult heterosexual relationships.

Failure to make this readjustment results in compromise in the form of a personality disorder. The psychopath clings to juvenile modes of behavior and the psychoneurotic evades adult responsibilities through the development of symptoms but the psychotic reverts to youthful and even infantile sources of pleasure. Elated patients behave like active, robust children and have an unusual demand for food. The depressed are dependent and often have to be fed. The more disordered revert to the period in which magic is in power and

the fanciful is not differentiated from fact. In such cases personality disorganization is not complete or uniform because many of the adult forms of behavior are retained in spite of the resumption of infantile habits. Toxic states and organic disease of the brain often merely facilitate disorder and disorganization.

However plausible these explanations of personality disorder may be the specific causes in individual cases remain obscure. We all transgress social and moral codes and we all have to deal with a sense of guilt. Moreover we all tend to avoid difficulty and revert to earlier situations and relationships in which we found pleasure and security. It appears therefore that the presence of personality disorder is determined by somewhat arbitrary standards, peculiar to each person. There is always the question of degree of deviation from these standards with due regard for the circumstances under which it occurs. In other words what might be considered normal for one person might be abnormal for another person having quite different tendencies and experiences. What is accepted in behavior at the present time may be considered abnormal fifty years hence.

The contributions of heredity and environment can be estimated only after very careful study of the family and personal background. Evidence for constitutional susceptibility likewise must be elicited rather than taken for granted. Structural anomalies suggest associated functional irregularities and deficiencies but there may be no serious maladjustment or the person may be especially sensitive to his peculiarities.

We are all aware of the qualities which lead us to designate a young man as effeminate or a girl as masculine. These designations are dependent upon body form, muscular development, the amount and distribution of fat and hair, the postures assumed, the gait and many other characteristics. By carefully noting these physical traits we may estimate the degree of physiological development and the extent to which it is consistent with the sex and age of the person. If a young man has conspicuously small genitals, feminine body hair and a high pitched voice he is necessarily handicapped in making a mature heterosexual adjustment and may confine himself to homosexual or autoerotic practices. If his general body form and his features strongly suggest the masculine and yet he is otherwise deficient he may struggle desperately to compensate for his deficiencies.

The extent to which there is exposure to situations and relation-

ships which have unusual emotional value necessarily varies with each person. The reactions are dependent upon inherited and constitutional susceptibilities, past experiences, personal desire, the potency and duration of the stress. The younger the person is the more actively he seeks new experiences and the more likely he is to be affected by them.

This enormous complex of forces compels us to all kinds of compromise, at times inadequate for social and personal needs. As a rule we fail to meet stress and reveal the underlying tendencies to disorder when confronted with some new and difficult situation such as business failure, the loss of a home or the death of a child. The new stress is referred to as a precipitating factor. Only a few of us are more than temporarily affected by such experiences. Their influences are exerted chiefly to the extent that we happen to be sensitive to them. In other words what appears to be a trivial matter may have great emotional value to some particular individual.

In recent years there has been a decided tendency to speak of personality disorder as though it was almost entirely psychological in nature. For convenience in language and thought we have made use of the concept of the unconscious. This is described as a vast reservoir of experience and of fundamental desires and tendencies to action, which we have inherited and which are modified according to our own personal experience. It is unfortunate that our language is not adequate to deal with unconscious phenomena. It would appear from our references to desires and other unconscious forces that the course of our lives was the result of deliberate choice. As a matter of fact our ability to direct consciously our activities is meagre and our efforts are often futile.

Our desires are so urgent that the selection and acquisition of means for their gratification present to different individuals a great variety of problems. The ways in which we attempt to achieve a solution of these problems have been described in psychological language. For purposes of illustration let us take a young man with strong sexual desires who would welcome marriage, a home and children, but who has been unable to find a suitable mate. The only socially approved means of frank gratification of these desires is marriage. Although more or less aware of these desires he must refrain from any frank expression or gratification of them. In other words, he must suppress them. Suppression can most easily be ac-

complished by converting the energy which these desires mobilize into activities and interests which will be socially acceptable. Such conversion of energy is called sublimation. In sublimating this energy, a young woman may become a nurse and specialize in maternity work, or she may be a social service worker and devote herself to child welfare. She may avail herself of less desirable sublimations by being too ready to volunteer information as to how other women should rear their children, or by lavishing affection upon some pet animal.

Or let us suppose that a young person feels uncomfortable, embarrassed, or ashamed on account of these desires or has some feeling of guilt due to indulgence. He may, under these circumstances, compensate for these feelings by being very formally correct and proper, by being unusually neat and cleanly in his habits and appearance, by excessive religious devotion, or by an outward marked aversion to anything of a sexual nature. Such compensations are productive of affectation and are wasteful of energy. When the compensation fails some less healthful means of adaptation takes its place.

He may feel that he is at liberty to decide how he will conduct his own personal affairs regardless of what other people think. In spite of the social urge he may permit himself some form of sexual indulgence. He may console himself then with the reflection that in all other respects he is above reproach. In this way he may minimize the importance of the self indulgence or even neglect consideration of it. This is characteristic of most of our thinking. Somewhat impulsively we give expression to personal desire in activity which on calm reflection would be embarrassing. We hasten to spare ourselves by offering a plausible explanation. This is done so automatically that we are seldom aware of self deception. This method of relieving emotional tension is called rationalization.

Suppose that while a young woman is struggling with the problem of indulgence someone takes advantage of her indecision and she is horrified by the consequences. She may find this experience so distressing that she is unable to refer to it. For some time afterward she may have no memory of it. She may suffer from amnesia for the experience; or she may be so emotionally affected that she is unable to think clearly about the experience and it is gradually put out of her thoughts. For the time being at least it is too painful an

experience for conscious reflection. Nevertheless she has been profoundly stirred by it and all but the conscious memory of it survives in the unconscious. The experience is then said to have been repressed.

Compensation, rationalization and repression are names given to well known devices for economizing emotional energy and lessening internal conflict. These devices are called mechanisms or dynamisms. They are observed in health as well as in sickness and are a part of our attempt to adjust personal strivings to reality.

If we venture a little farther into the field of psychopathology and especially that of psychoanalysis we find that the dynamisms<sup>2</sup> by which individuals seek an adjustment between conflicting forces are both numerous and complex. When an idea or an emotion underlying a symptom, tendency or the manifest content of a dream is expressed by its opposite the dynamism involved is called inversion.<sup>3</sup> A person may feel hate instead of love when too strongly tempted by that which his conscience forbids. We are most courteous to those whom we dislike and even in dreams an enemy may be represented as a friend.

If life becomes tedious and we grow weary of trying to surmount new obstacles there is a longing for old and familiar scenes and for the times when responsibilities were not so great. Vacations are characterized by play and relaxation from serious activities. Dreams consist of a series of pictures without logical connection and are expressed in the language of children and primitive people. A personality disorder is a compromise between the striving to meet the demands of normal life and the impulse to retreat to a more simple mode of adaptation. Some of the mentally sick turn back to a stage of development in which they merely play with the facts of life while others behave like infants and may even assume intrauterine postures. The reversion to a more simple mode of living is called regression.

It is stated that cannibals sometimes eat human beings for the purpose of acquiring the magic power which the devoured person is believed to possess. The eating of the same food, a wedding cake for instance, originally meant that a common bond was thus established

<sup>&</sup>lt;sup>2</sup> Healy, William, et al.: The Structure and Meaning of Psychoanalysis, New York, 1930, pp. 192–261.

<sup>&</sup>lt;sup>3</sup> Freud, S.: Interpretation of Dreams, New York, 1913, p. 375.

between those who participated. We still drink to the health of someone as though such a ceremony had magic influence. In our present civilized state these savage customs survive merely in symbolic form. Only a few psychotics believe they are actually cannibalistic but it appears that most people incorporate within themselves certain characteristics which are a part of their loved ones. Self reproach is the prompting of moral and ethical feelings acquired from those who have been idealized. The process of thus incorporating within one's self that which was a part of the external world is called introjection. According to psychoanalytic theory the self accusation of the melancholic is really an expression of the unconscious hate for a loved one who has been introjected.

Hysterical individuals are especially prone to give expression to repressed desires in the form of a disturbance of bodily function. An earlier scene, real or fancied and highly charged with emotional tension, is partially reproduced. Self reproach for having taken a false step in yielding to forbidden desire may be registered in the form of paralysis of one leg. In this way atonement is made for the liberties taken by the unconscious. Unconscious desires thus appear to be converted into physical symptoms and the process by which this takes place is called conversion.

The picture language of children and of primitive people becomes greatly condensed by means of the symbols which the normal, civilized adult uses. In his dreams are found remnants of this earlier language. A single dream fragment may thus be associated in conscious memory with a series of events. A patient dreamed of spools of darning thread and a ball of yarn shaped like an egg. She recalled that as a little girl she asked her mother where babies came from. At the time her mother was darning stockings and had a basket of thread and wool in front of her. Thus an early scene in which the patient's curiosity was greatly aroused and which was probably highly colored by feeling is presented in the dream merely by spools of darning thread and a ball of yarn.<sup>4</sup> In like manner the fusion of events, images and speech in the language of the mentally ill is illustrative of the dynamism of condensation.

As man evolved from his primitive state there was an ever increasing need for more practical means of giving expression to the

<sup>&</sup>lt;sup>4</sup> Zilboorg, G.: Most Common Mechanisms in Psychopathology, Personal Communication.

vast number of feelings and thoughts associated with his experiences. His language was hopelessly inadequate for this purpose and he therefore gradually elaborated signs or symbols by which he could more readily communicate with his fellow beings. In time these symbols became endowed with magic properties. Only a few centuries ago one of the means which the clergy employed for exorcising devils was the recital of magic words. The process by which an object or sign comes to represent an experience is called symbolization.<sup>5</sup> Each stage in the development of civilization has its own symbols but those of the past tend to survive. In the regression of the mentally sick the symbolization makes their language more difficult to understand. This is especially true of the schizophrenic, for he has returned to the stage in which his symbols are not only archaic but also endowed with magic properties.

It is only a century or two since human beings began to deal more directly and logically with reality. In the middle ages many natural events which worked hardship upon people were ascribed to the pernicious activities of witches. In pagan times they were regarded as manifestations of the wrath of the gods. Everywhere unseen forces were at work which might be diverted by magic formulas or ceremonies or through the magic powers of the witch doctor or of the medicine man. Life is now made tolerable for many people through the agencies of spiritualism or Christian Science. In other words the tendency to escape from the more painful and uncontrollable facts of life is very deeply rooted. In our day dreams we escape from reality and dwell a while where fancy rules. Even in the dreams which disturb our sleep our desires no longer remain ungratified. Much tension is released when we play with reality by means of witty and humorous comments. In spite of these and many other channels of escape life seems at times unbearable. Some additional burden drives us frantic and we may not regain our poise for weeks or months. If a person should be overwhelmed by the death of a loved one fancy may shield him for a time. If he could believe that the departed is once more restored his exhilaration might be excessive and his talk and general behavior might be extravagant. More often a person is tormented too long by people to whom he feels bound by social ties. His escape may be facilitated by a state of

<sup>&</sup>lt;sup>5</sup> Ferenczi, S.: Further Contributions to the Theory and Technique of Psychoanalysis, London, 1926, pp. 352-365.

emotional exhilaration in which he no longer feels bound by convention and is free to express himself without reserve. The process by which one is thus relieved from constantly adjusting to reality is sometimes called the dynamism of escape or flight.

As long as an individual remains emotionally attached to another person or object he is inclined to react to any comment upon or change in the loved object as though he himself were directly involved. When an automobile climbs a steep hill without the gears being shifted the driver feels the satisfaction of personal accomplishment. When the preferred candidate is not elected the voter has a feeling of personal defeat. If the favorite daughter is inclined to be neurotic she may develop the symptoms which characterize her father's illness. The process by which one thus becomes emotionally associated with a loved person or object is called identification. Not uncommonly when a member of the family dies the place is taken by another who adopts the position and manners of the deceased. The tendency to identification is at times so great that two or more members of the same family may simultaneously develop the same type of psychosis.

The tendency to transfer an emotion to an object or idea to which it is apparently unrelated is called displacement. Whenever the obstacles in the pathway of normal emotional discharge are too forbidding this dynamism may be called into action. Sometimes an inanimate object or even a pet animal suffers when we dare not give vent to our anger on the person toward whom it is felt. Our dreams are less painful through displacements of emotions upon neutral objects. In the hysterical individual there is usually a displacement of symptoms from below upwards—gasping or choking sensations instead of tension in the genital region—because the patient's conscience does not permit a more direct expression of sex feeling.

Under ordinary circumstances any impulse which is offensive to a person's conscience is expressed only in modified form if at all. When too painful for contemplation it may be expelled from conscious activities. Its recurrence tends to make the person more reserved lest in an unguarded moment the true nature of the impulse should be disclosed. Those persons who would be blind to their antisocial and unethical tendencies often become what are known as inhibited or repressed individuals. Their forbidden thoughts, desires and impulses have been repulsed into the unconscious. In psychopatho-

logical states inhibitory forces may retard motor activity to such a degree that a stuporous condition results.

When a forbidden thought, feeling or impulse gains expression it usually appears in modified form. Conscious ideals as well as the memories of past experiences prevent the more crude expression of unconscious tendencies. The final product may be so changed that its former associations may not be recognized. Such an alteration of unconscious tendencies is called distortion. The apparent strange content of our dreams is due largely to the distortion of unconscious desires which is necessary in order that they may conform with the standards of consciousness. We more often disguise our animosity with gentleness and courtesy. The desire for sexual gratification may be represented by a fear of burglars. The melancholic is consumed with fire when in reality an archaic symbol of sexual passion is being utilized in the distortion necessary for the conscious expression of sex tension.

When a woman has reached an age at which the prospects of finding a suitable mate are vanishing she may become unusually sensitive to being an "old maid." She may always be ready to tell how many opportunities for marriage she has had; she may protest that she preferred to have a career; she may keep herself informed of the frequency with which marriage is a failure; or she may feel that she must emphasize her equality with men. Such a mechanism is called a defense reaction and the individual showing it is said to be on the defensive.

Now suppose a young woman has two admirers, a wealthy one whom she merely respects, and one whom she really loves but who has a questionable financial future. She marries the wealthy admirer but then finds that he is impotent. A number of solutions to such a predicament can be imagined. She may try to obtain a divorce, or a separation, or she may desert her husband. Perhaps moral or religious scruples prevent consideration of any of these solutions. She may then try to remain faithful to her husband even though her thoughts and affections are elsewhere. She may be horrified (but at the same time fascinated) by dreams in which her husband has died or been murdered and in which she is married to the one she loves. She may be frigid toward her husband and at the same time have erotic feelings toward her lover. Her social consciousness may cause her to attempt to suppress these feelings, but in time sex tension

accumulates and she becomes uneasy and apprehensive. This condition may lead to a state of abnormal anxiety, or, if the sexual tension is relieved by excessive sexual indulgence it may result in a form of nervous fatigue. Later in life she may compensate for these indulgences and be driven by a sense of guilt to ritualistic obsessive cleanliness or by a compensatory and morbid fear of contamination. Through another means of escape from an intolerable life with her husband she may develop various forms of hysterical symptoms, which become aggravated in his presence and to such an extent that she must live in another environment.

Many other forms of escape from such intolerable relationships may evolve. A person may gradually become so depressed and discouraged that he wishes to escape from his difficulties by suicide. In other words, the struggle becomes at times so hopeless that the self preservative urge is overcome by self destructive impulses. His depression, however, may be characterized by self criticism and loss of self confidence to such a degree that he is no longer capable of assuming responsibility. On the other hand he may escape from his difficulties through a condition of excitement in which, contrary to his usual state, he is unusually happy or elated. He then regards all matters as being of trivial importance, and he no longer hesitates to make known his aversions and affections.

More serious disorders often accompany other attempts to solve the conflict between the sexual and the social drives. If the man in question developed feelings of guilt because of his wish to be unfaithful or more likely because of some clandestine experiences with another woman, he might project his own shortcomings upon his wife by suspecting that she too was unfaithful. He might suspect that the neighbors knew about his unfaithfulness and were talking about him and thus develop ideas or feelings of self reference. More than this, he might develop definite ideas that his neighbors were spying upon him, and that people shunned him because they had been told that he had venereal disease. Such conclusions, the result of obviously abnormal errors in reasoning, are called delusions. If he had the sensory impressions leading him to believe that he actually heard people refer to him as having a disease, he would be having hallucinations. In other words, hallucinations are sensory experiences without real objective stimuli. If this process continued, he might eventually reach a mental state in which he would be no longer concerned

about his own guilt but might feel that he was persecuted by other people because they were jealous of him. He might even believe that he was so superior to his imagined tormentors that their persecution could no longer affect him.

Such a solution of his problems would be most pernicious because the result is personality dissociation or a chronic state of personality disintegration in which fantasy and reality intermingle beyond the control of the individual. Longings and cravings are then gratified in a morbid dream-like world. In other words, through the formation of delusions, a woman might be convinced that she had never married her husband. She might even deny any knowledge of him. With the aid of delusions and hallucinations she might be freed of most of the responsibilities of reality and enjoy living in a fantastic world, a world constructed according to her own wishes, cravings and imagination, and one in which she and an imagined lover were the chief characters. In such a case the conflict would give rise to physiological changes in which sensory impressions were no longer dependent upon actual objective stimuli but would be created within her own personality in response to her cravings. In this condition she might have visions of her lover, hear his voice, feel his caresses, and be charmed by experiences far in excess of anything possible for her in reality. These hallucinations might be so vivid that she would have no doubt as to their reality. She might respond to them with expressions of ecstasy or charmed abstraction quite unwarranted by her surroundings. She might whisper or speak aloud in response to his voice. She might assume postures or behave in such a way as would make it evident that fundamental cravings were being gratified. Even in sickness, however, the social drive cannot be entirely annihilated and it may be a real disturbing element in this fantastic paradise. This urge may manifest itself in a longing to be faithful to marital yows or in accusing voices which warn her of terrible punishments for her unfaithfulness and which call her obscene names, or direct her to do things against her own wishes.

Such a process is referred to as a pernicious dissociation of the personality, or a splitting of the personality. In this condition there continues to be a certain amount of actual contact with the real world, along with the experiences of a fanciful world. Unfortunately, to the extent to which a person is habitually occupied with the experiences of a fanciful world, he is permanently incapacitated to adapt

himself to the real world. Such a person is technically referred to as being mentally deteriorated or demented.

Any of these solutions of personality conflicts may be observed in a person whose balancing forces have become temporarily disorganized on account of some abnormal physical condition. Illnesses caused by infection, toxins, drugs, or exhaustion from various wasting diseases, by disorganizing the healthful balancing forces, permit expression of emotional cravings in the form of psychotic or psychoneurotic symptoms. Such personality disorders are serious and prolonged in proportion to the seriousness and duration of the physical illnesses which cause them. For instance, if a person develops a psychosis while ill with typhoid fever and this physical illness is the chief cause of the psychosis, the symptoms of the latter will usually disappear with recovery from the physical illness. It often happens, however, that the physical illness merely precipitates a personality disorder in a person who previously has been very unstable and who might eventually have become mentally sick without any obvious physical illness. In such cases the personality disorder is often much more serious than one in which the chief cause is a physical illness.

Inasmuch as personality disorders represent immature attempts at adjustment between the individual and the environment, it is to be expected that the abnormal behavior observed resembles that characteristic of earlier stages of development. On account of the unevenness of personality development, however, and also because many adult and mature characteristics are retained in personality disorders, it is impossible for any particular disorder to correspond exactly to any special stage of development. Mature solutions of life's problems are the most difficult and complicated. It is quite natural, therefore, that those individuals whose inherited capacities are limited, or whose lives are especially difficult, should retreat to a mode of living which, being inferior and immature, is therefore less difficult and less complicated. Careful study permits us to observe that these attempts to solve life's problems represent a return to earlier stages in personality development. Such knowledge gives us an understanding of these disorders which is much more serviceable than the feeling that they are mysterious afflictions visited upon certain unfortunate individuals.

By approaching personality disorders from this viewpoint, it is possible to make some rather interesting observations. In those

disorders which are commonly referred to as the psychoneuroses we find in general no loss of contact with reality. Exception to this is seen in hysterical trances, fugues and amnesias and in conditions in which actual problems are obscured by ritualistic and obsessional compensations. The symptoms, however, are of such a nature that they relieve the affected person from many duties and responsibilities which would ordinarily be assumed in health. These illnesses permit considerable self indulgence, arouse sympathy and demand attention for the patient, somewhat similar to that which is bestowed by parents upon chronic invalid children. It will be noticed that in these disorders the sexual drive usually appears in disguised form and that the social tendencies are utilized largely for selfish interests.

In those disorders characterized by delusions the affected person obtains protection from the recognition of personal inferiorities, failures and discrepancies by transferring the responsibility for them upon others. It is much easier to blame others for mistakes than to accept responsibility for them. When the delusional formation is fully developed the patient may have the pleasure of realizing the day dreams of childhood. As though by magic power he becomes a distinguished individual and his superiority is so real to him that he believes others are envious of him. His delusions are so satisfying and preoccupying that he fails to recognize his actual dependent condition. In such disorders actual inferiorities, and most commonly those involving sex functioning, have given rise to such painful feelings of inadequacy that the affected person must protect himself from recognition of the facts by fanciful and delusional constructions. This in turn isolates him and often brings him into conflict with others. In the meantime the social urge has been thwarted in its development and may not be strong enough to prevent acts of violence when the patient feels called upon to protect himself from imagined enemies.

When personality disorders are manifested by changes in the state of feelings or prevailing mood, we often find a more obvious departure from adult forms of behavior. In conditions of excitement such as will be described in the manic phase of affective psychoses, we find definite increases and changes in the expenditure of energy. These include increases in general activity, playfulness, the more frank expression of desires formerly suppressed or repressed, and, in those who have an underlying feeling of insecurity, boastfulness and in-

timidation. These changes in energy expenditure produce behavior resembling that of childhood and youth. Behavior is determined more by sensory impressions than by reasoning processes with the result that the affected person is no longer able to inhibit or control the expression of more primitive tendencies. In those forms of depression accompanied by restlessness, agitation and apprehension the striving for socially approved ideals continues. At the same time feelings of depression are associated with the realization that the struggle has been useless and the apprehension that it will be in vain. In such conditions the blind, restless pacing back and forth resembles the behavior of an animal recently caged, the desire for social approval constituting barriers which cannot be surmounted. In depressions with retardation of general activity, the struggle for ideals and ambitions is more or less given up as hopeless and there is a corresponding reduction of activity, even to the extent of stupor in extreme cases. The general behavior, and particularly the postures, may resemble those of infantile or intrauterine life. The condition of dependence is obvious. All that may be left of former social strivings takes the form of horrifying dream-like experiences in which the patient is threatened with catastrophe.

Very interesting behavior is seen in catatonic disorders where there is dissociation between motor and sensory functions resulting in behavior which is practically beyond conscious control. In one form of these disorders there is practically no motor response, although the patient is apparently capable of receiving sensory impressions. As a result the affected person remains motionless. regardless of what happens, presenting much the same behavior as lower animals do when they are said to be feigning death. It appears in such conditions that the struggle between the social and more primitive desires is so keen that a disorganization of the personality has resulted. In animals, as soon as danger is no longer felt, normal behavior is resumed. Likewise in catatonic conditions when the acuteness of the struggle wears off there is a definite tendency to return to normal behavior. In other forms of catatonic disorders the individual may automatically resist or follow any suggestion made, and his behavior resembles either that of animals at bay or of those who are said to have been charmed. The keenness of the struggle is appreciated when one learns that some of these people have the imagined experiences of crucifixion and rebirth. In this way, release is obtained from a life which was impossible and the individual begins again in a world of his own desire.

In those personality disorders which terminate in mental deterioration the conflicts between the social and the more primitive impulses are so intense and prolonged that a compromise is often not reached until the personality has regressed to an infantile level. At this stage the individual is free to indulge in the most simple bodily interests and no longer wishes or even appreciates more mature responsibilities or concerns. On this account such people are referred to as being childish. We can readily understand how effectively life's problems might be solved if we could live as children again no longer harassed by distressing personal conflicts and responsibilities and free to indulge ourselves in play and fancy as we wished.

#### CHAPTER III

### CLASSIFICATION

Since psychiatric problems are exceedingly complex and subject to many variations no consistent classification of personality disorders has been universally accepted. Attempts have been made to classify nervous and mental disorders in accordance with what seemed at the time to be the most prominent characteristics. Some of these attempts have been successful if conclusions may be drawn from the extent to which certain classifications have been in use. The terms "mania" (meaning a condition of violent mental disturbance), and "melancholia" (meaning a condition in which there is an excess of black bile) have been in use since the time of Hippocrates (460 B.C.). It is obvious that the original meaning of these terms has little application at the present time.

From time to time writers have been attracted by a variety of prominent characteristics. The majority have selected terms which were especially descriptive of symptoms. The manic-depressive group of psychoses has been practically universally recognized in this way. The term dementia praecox, meaning precocious mental deterioration, has been applied to psychoses in which mental deterioration begins in adolescence, but it sometimes refers to adolescent psychoses in which deterioration is anticipated. In such cases the use of the diagnostic term is dependent upon the prognosis. sometimes happens, however, that the expected deterioration does not take place. This fact has led either to a change of diagnosis or to discussion at various times as to how much was implied by the term dementia praecox. Furthermore a diagnosis of dementia praecox often places the individual in a hopeless group of patients with the result that therapeutic efforts may be neglected. Such an unfortunate tendency is avoided by the use of the term schizophrenia (usually pronounced skit-so-frenia), meaning a splitting or dissociation of the personality. Such a term merely describes the nature of the abnormal process, does not necessarily imply an unfavorable prognosis, and is particularly applicable to those psychoses the symptoms of which may resemble or actually constitute the early symptoms of dementia praecox.

Other classifications have been based largely upon the etiology of the psychoses. Thus in toxic, infectious and exhaustive psychoses the essential causes are respectively toxins, infections and exhaustions. The complexity of the causes and such practical considerations as the easy recognition of symptoms have more often led to the selection of other than etiological terms. In this connection it is interesting to note that the term general paresis, so descriptive of the general weakening which manifests the disease, continues to be used in spite of the fact that the essential cause is known to be a syphilitic infectious process of the brain.

Among the classifications proposed for the functional psychoses is one<sup>1</sup> based upon the nature of the abnormal personality mechanisms involved. Groupings are made according to whether ungratified "affective cravings" (1) are suppressed, (2) repressed, (3) cause compensatory strivings, (4) cause by failure in the struggle a permanent regression to a less responsible state, or, finally, (5) dominate and cause a dissociation of the personality in spite of conscious efforts to maintain control.

As a result of psychoanalytic investigations it has been suggested that personality disorders might be classified according to the degree of instinctive and emotional development or in more technical language the disorder of any given individual is classified according to his dominant libidinal fixation. On this basis personality disorders are divided into two classes, the transference neuroses and the narcissistic neuroses.

It has been observed that only those who have established strong affectionate relations with others may become ill with transference neuroses while those who have difficulty in establishing such affectionate relationships are prone to develop narcissistic neuroses. More specifically the transference neuroses occur in persons who have libidinal fixation points later than the early anal stage in development. They include those disorders more commonly referred to as the psychoneuroses and are more amenable to psychoanalytic therapy. On the other hand patients who suffer from narcissistic neuroses have libidinal fixation points at the oral or early anal stages.

<sup>&</sup>lt;sup>1</sup> Kempf, E. J.: Psychopathology, St. Louis, 1920, Chap. V.

Their disorders take the form of paranoic, manic-depressive or schizophrenic psychoses and are much less amenable to psychoanalytic therapy.<sup>2</sup>

Such a method of classification is exceedingly valuable in that it takes into consideration the dynamic factors in personality disorder but it introduces the errors resulting from individual interpretation of intimate personal relationships which do not lend themselves to scientific observation. Psychoanalytic theory remains in a state of flux and several more decades of correlation with clinical experience will be necessary in order to determine to what extent it has practical value.

An essentially descriptive and behavioristic classification has been proposed by Adolf Meyer³ and adopted by a number of his followers. In this classification the interest is centered in the total functions and reactions of a patient as implied in the term ergasia, formed from the Greek root erg meaning work. Ergasia implies activity characteristic of an individual in contrast to a term like kinesis which is applied to merely a partial function of that individual. Ergasia was chosen in preference to an English word because it so readily permitted the use of prefixes. The phrase "reaction type" is also frequently employed because it suggests disorders which may be studied objectively.

By means of prefixes to the noun ergasia the various reaction types or personality disorders obtain a consistent nomenclature. The Greek nouns holos, meaning the whole, and meros, meaning a part, have been employed as prefixes to form the nouns holergasia and merergasia and the adjectives holergastic and merergastic. A holergastic reaction type is one in which there are fundamental changes in the personality which lead to distorted impressions of the self and the external world and which therefore make it impossible to deal with reality in the usual normal way. This type includes the large group of disorders which are commonly known as the psychoses. It is sub-divided into particular reaction types which are essentially the same as the well known psychotic forms of personality disorder.

Anergasia or the anergastic reaction type is one in which the personality disorder is associated with temporary or permanent change

<sup>&</sup>lt;sup>2</sup> Rickman, J.: A Survey, Brit. J. Med. Psychol., 6:270, and 7:94, 321.

<sup>&</sup>lt;sup>3</sup> The "complaint" as the center of genetic-dynamic and nosological teaching in psychiatry, New England Jour. Med. 199: 360.

in the structure of the brain. The general type of illness resulting is better known as an organic psychosis. Dysergasia or the dysergastic reaction type is dependent upon physiological disturbances involving the brain. It includes personality disorders resulting from metabolic or circulatory disturbances which interfere with the function of the brain and those disorders which are due to an excessive amount of toxic substances within the body. They are often called toxic psychoses and the acute disorders usually take the form of a delirium.

Thymergasia or the thymergastic reaction type is characterized by fundamental changes in mood with periods of elation and excitement which may alternate with periods of depression and retardation of activity. This type of disorder is well known under the general heading of manic-depressive psychosis or affective psychosis.

Parergasia or the paregastic reaction type includes the disorders ordinarily classed as schizophrenic psychoses or as dementia praecox. In these disorders there is a tendency to replacement of reality by the fanciful, to reconstruction of the conception of self and the external world through the distortions of illusions, hallucinations and delusions. At the same time there is a regression to the emotional relations and behavior habits of childhood and infancy, a change which is often permanent and a part of mental deterioration.

Oligergasia or the oligergastic reaction type is that of intellectual deficiency or mental retardation. There may be personality disorder in addition to the intellectual deficiency but in such cases the appropriate reaction type should be included in the diagnostic grouping.

Merergasia or the merergastic reaction type is a term for those disorders in which there is very little if any distortion of the relation between the person and the external world but instead a preoccupation with feelings of physical discomfort, loss of function without organic basis, morbid anxiety and ritualistic behavior. In other words merergasia is another term for the psychoneuroses or what are often called the neuroses.

Classifications tend in general to describe the way in which the individual suffering from a disordered personality reacts to his environment. Little or no indication is given of the quality or quantity of environmental influences and there is seldom any indication of inherent capacities to resist them. As these considerations are vital in the practical dealing with individual patients diagnostic terms are

quite inadequate in describing individual psychoses. These terms may, nevertheless, be very suitable for the description of the more common characteristics in group psychoses.

For this reason it is desirable to make a diagnostic summary which expresses concisely the essential facts concerning the particular patient. This summary includes a statement of (1) the important environmental influences and their modifiability, (2) the constitutional capacities and predispositions of the patient, and (3) the nature and extent of the deviation resulting from attempts at environmental and self adjustment. Such a summary is possible only after an intensive study of the patient's personality and environment, and of the various manifestations of the illness. In no other way can a thorough understanding of the patient's illness be obtained, nor does any other approach afford as many possibilities for rational therapy. Certainly this study of the patient's needs is much more profitable than the former custom of assorting patients according to "cardinal symptoms" and then, after a diagnosis has been made, giving up the search for further evidence.

It is well to remember that classifications gradually change as knowledge increases, that diagnostic terms seldom convey precisely the same meanings to different individuals. After all, these terms are more or less arbitrary and are used as a matter of convenience in dealing with innumerable details. In view of these considerations some hesitation is felt in presenting a classification. The terms finally selected are those which are now more generally accepted and which appear to have the most practical value at the present time.

Accordingly all personality diseases or disorders are divided into four large groups. One group, which is composed of those psychoses in which the disorders are largely psychological in nature, include the affective, paranoic and paranoid, schizophrenic, and psychoneurotic disorders. A second group, called the toxic psychoses, are an expression of abnormal physiological conditions and includes what are commonly referred to as toxic, infectious and exhaustive psychoses. A third group, called the organic psychoses, is composed of those psychoses in which there is an actual anatomical change in the nervous system, and particularly in the brain. This group includes those psychoses which result from injuries, tumors, infections or from degenerative conditions such as cerebral arteriosclerosis and senility. In this last group there is actual change or destruction of

essential structures in the nervous system. The fourth group, called constitutional deficiency, is composed of those personality deviations which are due to constitutional, physical, intellectual, instinctive or emotional defects. This group also includes those psychoses in which a constitutional defect forms the most conspicuous characteristic.

In subsequent chapters a detailed presentation and discussion of these disorders is given. The four main groups are subdivided according to Standard Classified Nomenclature of Disease,<sup>4</sup> a classification recently approved by the American Psychiatric Association. This classification is now accepted throughout the United States. Disorders in childhood are usually not so well defined as those of adults but for the sake of a better common understanding a classification<sup>5</sup> approved by the Committee on Statistics of the New York State Department of Mental Hygiene is employed in this book.

<sup>&</sup>lt;sup>4</sup> Compiled by The National Conference on Nomenclature of Disease.

<sup>&</sup>lt;sup>5</sup> Brown, S. II et al.: An outline for the psychiatric classification of problem children, Utica, N. Y., 1933.

# CHAPTER IV

### AFFECTIVE PSYCHOSES

(Manic-depressive Psychoses; Thymergastic Reaction Types)

Definition. An affective psychosis is a form of personality disorder in which the essential characteristics are disorders of mood. By this is meant an abnormal deviation from the usual state of feelings. The deviation may take the form of elation with corresponding increase in psychomotor activity or the opposite in the form of depression with retardation of all activity. These deviations are really phases of the same fundamental emotional disorder and they are therefore commonly known as manic-depressive psychoses. Several types of affective psychoses are recognized according to the kind and degree of mood disorder.

Frequency. These disorders constitute 10 to 15 per cent of all psychoses. Attacks are exceedingly rare before ten years of age<sup>1</sup> and hospital reports show that these psychoses more frequently occur between the ages of fifteen and forty. Statistics show that among the first admissions to state hospitals there are nearly twice as many females as males.<sup>2</sup>

Causes. Perhaps half of these patients have inherited<sup>3</sup> tendencies toward mood disorders but with our present knowledge it is impossible to make a positive statement.<sup>4</sup> Equally important are the ambivalent emotional relationships developed in childhood toward members of the family. Hatred and extreme affection, each evoked at different times by the same person, determine this ambivalence.

<sup>&</sup>lt;sup>1</sup> Kasanin, J.: The affective psychosis in children, Amer. Jour. Psychiat., 10: 897.

<sup>&</sup>lt;sup>2</sup> Fuller, R. G. and Johnston, M.: The duration of hospital life for mental patients, Psychiat. Quart., 5: 567.

<sup>&</sup>lt;sup>3</sup> Rosanoff, A. J. et al.: The etiology of manic-depressive syndromes with special reference to their occurrence in twins, Amer. Jour. Psychiat., 91:725.

<sup>&</sup>lt;sup>4</sup> For a detailed presentation of this problem see the author's Essentials of Psychopathology, Chap. I.

Repeated intimate personal contacts lead to excessive or cyclothymic emotional reactions and finally to affective psychoses. Members of the immediate family, especially parents, are often responsible for the cultivation of these unhealthy habits of adjustment. In general it may be said that there is a tendency toward the accumulation of emotional tension resulting from experiences to which the person has been unable to make normal adjustment. As this tension increases the feeling of need for an outlet becomes more urgent. When inhibitions finally give way the reaction is excessive and at the time apparently without adequate cause. This tension may have been accumulating for months or years. The reaction may be excessive and prolonged somewhat in proportion to the intensity of the unexpressed feeling and to the length of time during which it has been repressed.

Many people who develop affective psychoses are described as having been moody. They lack emotional poise in meeting the unusual occurrences of daily life. They often feel inadequate to deal with life's problems and are too prone to hold themselves responsible for ordinary mishaps or the inevitable failings of human beings. the other hand they may be constantly seeking some means of escape from the more serious concerns and responsibilities of life through various kinds of diversions, ever-changing scenes and new relationships. It is difficult for them to pursue any thought or principle of action to its conclusion and they are easily distracted by accidental ephemeral interests. They are unusually responsive to the attitude and feelings of others and consequently they become downcast or exuberant on slight occasion. Such individuals are referred to as syntonic or cycloid or extroverted. They more freely give expression to their feelings than the average person and they appear to be overwhelmed by unusual shocks such as failure in business or the death of a relative.

Such calamities as business failures, serious accidents, unusual domestic strife, the death of relatives or other trying emotional experiences are usually not sufficient in themselves to cause a psychosis. Such an event much more often constitutes the final precipitating factor<sup>5</sup> in an already susceptible person. In like manner reduction in physical health by infection, a toxic agent or exhaustion may so

<sup>&</sup>lt;sup>5</sup> Travis, J. H.: Precipitating factors in manic-depressive psychoses, Psychiat. Quart. 7: 411.

deplete reserve forces that latent psychotic tendencies become manifest. If there are obvious external causes and the reaction in the form of sadness and discouragement is more intense and prolonged than the circumstances warrant, it is sometimes called a reactive depression.

Symptoms. Affective psychoses manifest themselves by an exaggeration of the normal mood variations. These abnormal changes in mood occur in attacks or phases which at first glance seem quite dissimilar, but which in reality are simply different manifestations of the same disorder. There are two phases of this disorder. One is called the manic phase and the other the depressive phase. As will be seen by the following descriptions one phase is the counterpart of the other and when considered together they are really the opposing extremes of the same fundamental illness.

#### MANIC PHASE

This phase is characterized by acceleration of all functions of the individual, and by a more or less pleasant emotional state. It is divided clinically according to the degree in which the mood is deviated from the normal, as follows:

Hypomanic condition. This condition represents the mildest degree of mood variation from the normal. In this state the patient is governed by prolonged feelings of elation, exhilaration and unusual good health. Behavior and thinking are accelerated and there is a moderate amount of overactivity, overtalkativeness, increased distractibility, playfulness, mischievousness and loss of poise. There is a general impairment in the capacity for conservative thought and action. In many ways this condition resembles the first stage of alcoholic intoxication.

A large proportion of hypomanic persons are not recognized as being psychotic. They feel unusually well and their conduct may not attract attention, especially if it is observed for only a brief period. Whatever has been characteristic in health is now exaggerated. Eating, drinking, smoking and sexual activities are increased. Digestive disturbances are uncommon and there is seldom any difficulty with constipation. There are more social engagements, money is spent freely, new ventures are undertaken without hesitation and there is much less regard for convention or any other barrier to activity. The insecure become haughty, boastful, aggressive and

quarrelsome. It seems to the patient as though he had overcome his former inhibitions. He is annoyed by the slow pace and conservatism of others. His distractibility and his abnormal urge to keep doing something force him to undertake much more than is possible to accomplish and his attention is so easily diverted that nothing is completed. Attempts to direct or curb this excess activity are likely to be regarded as meddling. Sometimes the person feels driven and wishes that he might be able to relax.

Manic condition. This condition is essentially an exaggeration of the hypomanic condition. It is characterized by marked overactivity, overtalkativeness, and so forth. Thought processes are accelerated to such an extent that ideas are incompletely expressed and are connected by superficial associations. In other words, there is a "flight of ideas." Talk is often loud, vulgar and profane. Violence, destructiveness and immodesty are fairly common. The attention given to sleep and other physiological needs is often irregular. Illusions and vague hallucinations are fairly common. Delusions when present are transient and not systematized.

With this degree of excitement the abnormal condition is obvious and treatment in the comparatively neutral environment of a psychopathic hospital is necessary. Further exposure to the usual social contacts accentuates the excitement. Often it is advisable to undertake hospital treatment while in the hypomanic state. As the excitement increases fatigue becomes an ever greater factor in the manifestations of the illness. A surprising amount of energy seems available and the patient appears to be able to tolerate insufficient food and sleep and exposure to cold as well as a degree of activity which is not possible in health. There are many indications however that the body cannot continue at this pace. Among them are failing appetite, loss of weight and sleeplessness. Women are very likely to have menstrual irregularities and finally amenorrhea.

Hypermanic condition. This is the most exaggerated form of the manic phase. Overactivity is so marked and prolonged as to interfere with sleep and eating and may lead to physical exhaustion.<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Bowman, K. M. and Raymond, A. F.: A statistical study of hallucinations in the manic-depressive psychoses, Amer. Jour. Psychiat. 11: 299.

<sup>&</sup>lt;sup>7</sup> Allen, E. B. and Henry, G. W.: The relation of menstruation to personality disorders, Amer. Jour. Psychiat., 13: 239.

<sup>&</sup>lt;sup>8</sup> Derby, I. M.: Manic-depressive exhaustion deaths, Psychiat. Quart., 7: 436.

Clothing may be entirely discarded in order to facilitate freedom of activity. Thought processes are accelerated to such an extent that ideas can be expressed only by phrases, words or syllables. Talk is so continuous that the patient becomes hoarse or is unable to speak above a whisper. Filthy habits, destructiveness, impulsiveness and violence are common. There is often some confusion associated with illusions and hallucinations.

## DEPRESSIVE PHASE

This phase is characterized by retardation of all functions of the individual and by a more or less painful emotional state. Like the manic phase the depressive phase is divided clinically according to the degree to which the mood is deviated from the normal, as follows:

Mild depression. This may be described simply as an exaggerated and prolonged "spell of the blues." In this state the patient is influenced by prolonged feelings of sadness, depression, discouragement and gloom. Behavior and thinking are inhibited and there is a moderate amount of underactivity, undertalkativeness, loss of self assurance, apprehension, ideas of unworthiness, self accusation, feelings of unreality and loss of interest and initiative. Ordinary daily tasks are performed with great effort. Suicidal thoughts and attempts are common.

A mild state of depression is seldom recognized by the casual observer especially if there is a strong desire to conceal the true state of feelings. Friends and relatives may notice that the mildly depressed person is tense, sleepless, has digestive disturbances and is inclined to be preoccupied with his worries but they are unaware that such a person is most likely to commit suicide. Most of the suicides recorded in the newspapers are the result of failure to recognize the seriousness of this condition. Mildly depressed persons are found everywhere and unless there have been previous attacks of manic-depressive psychosis psychiatric observation and treatment is often neglected. As soon as a physician or surgeon is consulted he is responsible for the welfare of his patient and it makes little difference how skillfully the treatment is carried out if it is terminated by suicide.

Marked depression. This condition is essentially an exaggeration

<sup>&</sup>lt;sup>9</sup> Yaskin, J. C.: The feeling of unreality, Arch. Neurol. & Psychiat., 33: 368.

of mild depression. Feelings of depression are more profound; behavior and thinking are slow and laborious; ideas of unworthiness and self accusation tend to become fixed. Occasionally there are vague hallucinations. Insomnia, loss of appetite and constipation are common. Patients suffering from this degree of depression may use every opportunity to harm themselves, i.e., they may be actively suicidal.

Stuporous depression.<sup>10</sup> This condition is the most exaggerated form of the depressive phase. Behavior and thinking are retarded practically to inactivity and mutism. The patient is usually markedly confused and has unpleasant and sometimes horrifying dreamlike hallucinations and delusions. Fantasies about death and rebirth are fairly common and these patients accept the prospect of death with resignation. The condition may become so marked that the patient is stuporous. There is often inability to attend to ordinary physiological needs so that spoon or tube feeding may be necessary and nursing attention required because of incontinence. A condition of this kind has been called a benign stupor<sup>11</sup> because the outlook for the attack is usually good even in cases showing the catalepsy and negativism commonly found in catatonic stupor. In the benign cases there is frequently a history of previous manic-depressive attacks.

In some cases of depression with retardation perplexity is an outstanding symptom. Inability to comprehend the surroundings as well as their strange bodily feelings contributes to misinterpretations and behavior suggesting a schizophrenic disorder. This kind of a depressive reaction is sometimes referred to as the perplexed type. 12

Some depressed patients focus attention upon feelings of physical discomfort, the cause and symptoms of which are largely imaginary or exaggerated.<sup>13</sup> They often say that the bowels move insufficiently, or not at all, that the stomach does not empty itself and that part

<sup>11</sup> Hoch, August: Benign Stupors, New York, 1921.

Rachlin, H. L.: A follow-up study of Hoch's benign stupor cases, Amer. Jour. Psychiat., 92:531.

<sup>12</sup> Hoch, A. and Kirby, G. H.: A chemical study of psychoses characterized by distressed perplexity, Arch. Neur. & Psychiat., 1:415.

<sup>13</sup> Ziegler, L. H.: Clinical phenomena associated with depressions, anxieties and other affective or mood disorders, Amer. Jour. Psychiat., 8:849.

<sup>&</sup>lt;sup>10</sup> Munn, C.: Historical survey of the literature of stupor with the report of a case of twelve years' duration with complete amnesia for ten years, Amer. Jour. Psychiat. 13: 1271.

or even all of the body is dead. In such cases the psychosis is sometimes referred to as a hypochondriacal depression. In other depressed patients, especially those who are middle aged or older, there may be restlessness, tension, <sup>14</sup> fretfulness and apprehension. These patients may groan, wail, shriek, continually walk to and fro wringing their hands, bite their finger nails or pick at their skin. They may also tear their clothing, pull out their hair and make desperate attempts at suicide. In this form the illness is usually referred to as an agitated depression.

## MIXED STATES

Sometimes there is a mixture of manic and depressive symptoms, an apparent disharmony between the mood and the psychomotor expression which accompanies it. For instance, the patient may feel happy, exhilarated and euphoric and at the same time be unable to express these feelings in the usual way on account of difficulty in thinking or a general retardation of motor activity. On the other hand, the feelings may be those characteristic of a depression, while at the same time there is an increase in the amount of motor activity. An example of this is seen in agitated depression as described above.

Course of illness. Affective psychoses follow many different courses in the manifestation of the illness. Most of the possibilities are outlined briefly as follows: (1) a manic or depressive phase may be followed by an interval of normal health, which in turn is followed by a repetition of the original attack (such psychoses are sometimes called recurrent mania or recurrent melancholia, according to whether the recurrent attacks are manic or depressive in nature); (2) a manic phase may be followed by an interval of health and then by a depressive phase, and there may be then a repetition of the cycle (sometimes referred to as alternating psychoses); (3) a manic phase may be followed immediately by a depressive phase and this in turn by another manic phase (called the circular type); or (4) one phase may follow the other immediately, and then there may be a period of normal health (in which case the psychosis is said to show a double form). In addition to this there may be recurrent attacks of various combinations of mixed states. Individual attacks may pass through all stages of severity.

<sup>&</sup>lt;sup>14</sup> Muncie, W.: Depression with tension, Arch. Neurol. & Psychiat., 32: 328.

As a rule manic and depressive phases have a gradual onset and termination, and as either phase approaches the normal condition it is often difficult to estimate the extent to which manic or depressive tendencies are present. Indeed, a patient may appear entirely well to the casual or untrained observer while still in a state of convalescence and emotional instability.

Prognosis. There are few illnesses in which the outlook for recovery from the individual attack is as good as it is in affective psychoses. As a rule the manic phase lasts for a few weeks or months, and the depressive phase from a few months to a year or more. In general it may be said that the more abrupt is the onset and the more acute or intense are the symptoms, the better is the prognosis. When the patient is still young the symptoms are more likely to be acute and intense, and therefore temporary, whereas later in life there is a greater tendency toward the formation of delusions and the fixation of abnormal habits of behavior. 15 Occasionally in people past middle age and after many attacks there is a tendency for the psychosis to become chronic and for a very mild degree of mental deterioration to occur. On the other hand, an individual may enjoy good health throughout life with the exception of one or two attacks. When the first attack occurs between the ages of twenty and forty a recurrence is less likely than when it appears earlier or later in life. According to state hospital statistics there is no recurrence of an attack of sufficient severity to cause readmission in more than half of the cases of manic-depressive psychosis. 16 In general the prognosis is favorable to the extent to which there is little inherent emotional instability and in proportion to the degree in which contributing environmental influences can be favorably modified.

Excerpts from illustrative cases. The following is a brief abstract of an affective psychosis in an unmarried girl of nineteen years in whom strong instinctive cravings which she tried in vain to repress, obtained excessive and exaggerated expression in a manic phase.

There were no known hereditary factors and nothing in her early

<sup>&</sup>lt;sup>15</sup> Wertham, F. I.: A group of benign chronic psychoses: prolonged manic excitements, Amer. J. Psychiat., 9:17.

<sup>&</sup>lt;sup>16</sup> Pollock, H. M.: Recurrence of attacks in manic-depressive psychoses, Amer. Jour. Psychiat., 11: 567.

Steen, R. R.: Prognosis in manic-depressive psychoses, Psychiat. Quart., 7:419.

life to contribute to the psychosis except the fact that she was reared in an old fashioned religious atmosphere which was quite devoid of sex training or even consideration of ordinary instinctive strivings. On this account it is to be expected that she would be prudish and sensitive about sex topics and that she would have periods of depression and rumination subsequent to adult sex awakening at puberty. In other words her unhygienic training made it extremely difficult for her to accept sexual cravings and hopes as being quite normal, and instead caused her to regard them as disgraceful and unholy. Her mother, having the same prudish attitude, would not share any confidences and there was no other person with whom she felt she could discuss "such embarrassing matters." Regardless of these obstacles the sexual cravings continued to demand recognition and the unsuccessful struggle to repress them caused her to have periods of depression. Finally in her efforts to escape from an increasingly evident source of mental conflict she decided about a week before she became definitely sick that she would enter a convent. She hoped, of course, that such an environment would insure for her minimum opportunity for sexual thoughts and temptations. The repression of her instinctive cravings had extended over a period of many years and the expression of her innermost thoughts and feelings in the psychosis was therefore excessive. After her decision to enter a convent the symptoms of the manic phase began to manifest themselves rapidly. She seemed unusually enthusiastic and buoyant, excitedly telling everyone of her decision. For the three days before coming to the hospital she was definitely overactive, excited and overtalkative, she disclaimed her mother, said that her mother was opposing her and talked of being in personal contact with the devil. She talked incessantly of babies, pregnancies, school friends and a nun's life.

On admission she was overactive, overtalkative, embraced everyone around her and threw herself about on the bed. Her talk showed flight of ideas, punning, rhyming and distractibility. Its content dealt chiefly with confused ideas of recent childbirth and religious conflicts. She was definitely elated, saying that she felt "as happy as a lark." Her spontaneous talk was quite characteristic of the manic condition: "Who are you? Dr. Green? I am not so green as you think I am—I was nearly crazy when I came to the hospital—Lilian and I aren't twins, isn't that correct?—I am not a baby—I was one of triplets—I am no more innocent than a married woman

should be—I have a little daughter—I have been in a trance—then I was in France." Later she talked as follows: "I've had four sets of quartets—that makes sixteen—they can't be bigger than fleas—I'm only twelve, but I've had eight children this morning—I'm too young to have a baby—you're my mother, aren't you—you're a nut—I've had about a dozen bottled up here—I'm going to have another—a real one,"—and so forth.

Here is shown considerable tendency to superficial associations, such as "Dr. Green? I am not so green," and also "trance, then I was in France." There is also an obviously frank expression of instinctive cravings and hopes.

The following spontaneous talk on the part of a middle aged school teacher during the course of a mental examination shows flight of ideas, continual superficial sound association between ideas, an uncontrollable desire to express absurdly extravagant ideas and the common tendency to be interested in any environment essentially as a source of amusement and entertainment. The spontaneous talk was as follows: "Now be careful, Judge, (referring to the physician)—how much are the costs—sixteen dollars—sixteen dollars a day I went to Sing Sing—Sing Sing—bing bing—ding ding dong ding d

The following hypomanic patients make obvious their elated feelings as well as their inability to maintain any other than a playful, frivolous, mischievous, fun-provoking attitude in any situation or environment. Although both patients appreciated that they were under mental examination the answers of the first patient to usual routine questions were as follows:

How do you feel? "With my finger. How do you?"

What sort of a mood are you in? "That sort of a mood—mood of sunshine and light, of all times and ages, of all lovers and wives."

Do you feel happy? Playfully makes face as though crying and says, "I was never so happy in my life—that's my trouble, I've always been too happy."

Are you elated? "But not inflated—I have no food in me—you

nut (referring to the physician)—you're a darling—(notices nurse in distance) Oh Kelly—for the love of God, bring me my breakfast."

How do people treat you? "Very well—why, what do you mean? Sometimes I treat and sometimes they do—it depends upon who has the beer."

The second hypomanic patient could not refrain from elaborating in a mirthful way upon a test story which he was asked to repeat after having read it aloud once. The actual story is as follows:

"A cowboy from Arizona came to San Francisco with his dog which he left at a dealer's while he purchased a new suit of clothes. Dressed finely, he went to the dog, whistled to him, called him by name and petted him. But the dog would have nothing to do with him in his new hat and coat, but gave a mournful howl. Coaxing was of no effect, so the cowboy went away and donned his old garments, whereon the dog immediately showed his wild joy on seeing his master as he thought he ought to be."

The patient's reproduction follows. It will be noticed that he starts well enough but soon shows his inability to confine himself to the facts.

"Once a cowboy in Arizona came into town and left his dog with the dealer until he went out to change his clothes. He went out and bought a new suit, hat, shoes, etc., then wherefore and whereby—and said—here Buck (whistles for dog) and Buck gave him the once over, the up and down and the double razar and then he let forth upon the balmy air a little old last year's howl and the cowboy went back while the beating was good and blew himself into his old togs. Then he wandered hotfoot back to the hell hound again and the li'l old nut writhed in an ecstacy of superhuman joy and said—Welcome to our city, Buddy, welcome to our city, and he gave him the glad hand and they both took some suds at a nearby bar, Buck stood treat. Amen.'

Precisely the same tendencies and capacities are manifested in the above hypomanic patients as are capitalized by vaudeville artists and others who provide amusement and entertainment for us. The essential difference between the two is that the professional entertainers can be serious or stop their mirthful efforts at will, whereas the patients are compelled by their feelings to continue as long as the manic phase is present.

The marked contrast between the above manic productions and those of the typically depressed person is shown in the following letter written during a depressive phase by a prominent physician and government official, to his wife.

"This is the beginning of the end. When I think of the experience of the past year—and the futility of it all—I cannot expect this sort of thing to continue. Bankrupt mentally and physically; unable to perform my routine work; getting more so every day. God help us all! What I say or write does not seem to mean anything either to myself or others. It seems to me now that I have been beside myself all the past year. A little time when I was feeling well, believing in my ability to discharge my duties; but alas! what I did or said then appears in retrospect to have been tainted with unreason or impracticability. My plans no longer work out. I come down every morning-by car; I have come to dread the very pleasant walk through the park, because from house to office, I go over the dark record of failure a dozen times and sap whatever courage and faith I have on starting. My poor wife and children! Good, kind, loyal, even yet trusting in me for what I can no longer afford. The time has come when you must take the direction and do as well as you can for all of us with what means you have. It is no longer honest—it has been dishonest for a long time—for me to hold a position that I cannot fill and to draw pay for work that I do not do. Why don't I do it? (probably thinking of suicide). God knows that I know the necessity: what it means to be down and out!!—a dependent and derelict instead of occupying a useful and honorable position. But I cannot help it. I solemnly swear to God that I try and have tried each and every day for weeks past to do my duty, to perform my work. It is heartbreaking to see—would be for one who has had confidence in me or believed that I have ever accomplished any good work—which I sometimes doubt—to see me sit down in the morning, get out my work, and so forth. I begin with the determination to succeed this time—it is perfectly simple—I consult the last report there is some difference which involves a decision. I am unable to make up my mind! Then I begin to tire, take up some correspondence, and the 'work' goes over to tomorrow. Never shall I be able to complete it. Even the correspondence gets harder for me. I tell the stenographer what to say instead of dictating in full as I used to do. I find myself forgetting and uncertain about former decisions. I make contradictory statements and lay aside what puzzles me instead of solving the question then and there and acting upon my decision. I am simply 'botching' my work, as I have done—I now see—for a year or more past. I cannot remember and keep in mind for use even the simplest data. Simple routine perplexes me horribly—I cannot decide. I seem to be living in a horrible dream from which I cannot believe that I shall awake. My last report is hopeless. I should never have undertaken it. Yet at the time I thought I was doing that work well.

"I write this—and at night shamefully, cowardly, hand it to you. You look at me with disgust, throw it away. Yet I seem to feel that I should tell you the truth. But it only pains you and there is no help from you or any other source. I must move through routine—which is all that keeps me going—as long as I can. Then the end!"

This letter reveals an emotional state and an attitude toward self and the external world which is typical of depression. In it are expressed feelings of hopelessness, self condemnation, ideas of unworthiness, great effort to perform routine tasks, inability to make decisions, feeling of unreality, tendencies to minimize the importance and value of tasks already accomplished, feelings that the end of his career is approaching and probably that it is his duty to commit suicide in order to avoid becoming an expense and care to his family. As far as the patient is concerned these feelings, experiences and interpretations are just as real as any normal experience.

#### INVOLUTIONAL MELANCHOLIA

Closely associated with and usually regarded as forms of affective psychoses are the depressive reactions occurring at middle age.<sup>17</sup> One of the most well defined of these is called involutional melancholia.<sup>18</sup> Undoubtedly this psychosis has as a part of its etiology the decline or involution of the sex function and an accompanying readjustment in the glands of internal secretion. Consequently this psychosis is usually associated with the menopause in women and

<sup>&</sup>lt;sup>17</sup> Jameison, G. R. and Wall, J. H.: Mental reactions at the climacterium, Amer. Jour. Psychiat., 11:895.

Saunders, E. B.: A study of depressions in late life with special reference to content, Amer. Jour. Psychiat., 11: 925.

Farrar, C. B. and Franks, R. M.: Menopause and psychosis, Amer. Jour. Psychiat., 10: 1031.

<sup>&</sup>lt;sup>18</sup> Pearson, G. H. J.: An interpretative study of involutional depression, Amer. Jour. Psychiat., 8:289.

with the decline of sex function in men occurring ordinarily a few years later and most commonly between the ages of fifty and sixty. Persons who have had narrow interests and social contacts, a marked proclivity for saving, a troublesome conscience and who have outwardly adhered to rigid standards of conduct appear to be especially susceptible to this form of illness.<sup>19</sup> Other etiological factors are similar to those in affective psychoses in general with the exception that the factor of heredity appears to be less important in involutional melancholia than in manic-depressive psychosis.<sup>20</sup> Involutional melancholia probably does not constitute more than 3 to 5 per cent of all psychoses.

The symptoms are in many ways similar to those in depressive psychoses but with greater tendency towards physical complaints and fixed ideas or to delusions of a self accusatory and hypochondriacal nature. There are usually more or less restlessness, anxiety, tenseness, moaning, groaning, wringing of the hands, and the illness is often accompanied by insomnia, poor appetite and loss of weight. One striking characteristic which is frequently observed is the ability to appreciate a joke, to smile and to be merry for short intervals.

In the more favorable cases these symptoms may be present for a year or more before recovery takes place. In the unfavorable cases some patients fail physically and there is a tendency toward the development of bizarre ideas and behavior and in some cases there may be delusions of grandeur.<sup>21</sup>

About 40 to 50 per cent of the patients regain their health. Unfortunately in some of the more favorable cases the course is terminated by suicide. Those who do not recover gradually pass into a chronic delusional and mildly deteriorated condition. The prognosis in these cases appears to be determined in part by the type of personally affected. Those who have been conspicuously syntonic tend to recover while those who have been schizoid develop a chronic illness with schizophrenic manifestations.

<sup>&</sup>lt;sup>19</sup> Titley, W. B.: The personality in involutional melancholia, Arch. Neur. & Psychiat., 36: 19.

<sup>&</sup>lt;sup>20</sup> Farr, C. B. et al.: The relative importance of hereditary factors in manic-depressive psychosis and involutional melancholia, Jour. Nerv. & Ment. Disease, 71:409.

<sup>&</sup>lt;sup>21</sup> Hoch, A. and MacCurdy, J. T.: Prognosis of involutional melancholia, Arch. Neurol. & Psychiat., 7:1.

Excerpts from illustrative case. The following abstract of the records of an unmarried laborer, aged forty-eight, will serve to illustrate involutional melancholia. In this case such symptoms as moaning, crying, restlessness, anticipation of harm, protestations of innocence, ideas of reference and delusions of persecution are prominent.

There were no known hereditary factors. The patient had had a partial elementary school education. His habits had become definitely fixed at an early age; his interests were confined to his work, his home and his religion. Although he had worked faithfully all his life most of his earnings were spent in maintaining himself and his sisters.

A little over a year before admission he met with an accident in which injury to his arm incapacitated him for work. Later he was kept from work by an attack of "dysentery." His small savings were soon exhausted, and he had to be supported by charity. Four months before admission he began to complain that his bowels were "all gone," and that black blood from his arm was in his stomach and was causing pain. He felt that white spots on his arm proved this. He was treated for a while in a general hospital but his complaints became more fantastic and it was evident that he was mentally ill.

On admission he seemed very depressed, cried a good deal and had many complaints, apprehensions and delusions. Some of these were: "The doctors have taken my savings"; "They are after me now"; "I can't sleep"; "My stomach and bowels are all gone"; "My insides are eaten out" and "I am going to die."

After he had been in the hospital a few weeks he began to protest that other patients had stolen his clothes. He seemed confused, wandered about trying to find the way out, or hunted for lost articles. He complained angrily that he had been accused of stealing, and insisted repeatedly that he had never harmed anyone. At times he hid his clothes under the bed. His daily conduct was characterized by a great deal of scolding, whining, groaning, restlessness and agitation. In his talk he continually drifted to a few set ideas or delusions of a persecutory nature. A sample of his talk is as follows:

"Yes, sir, yes, sir, good a man as ever lived." (Weeps in spasms of utter dejection, without tears.) "It was all put on me by outsiders." (Raises right hand as if taking oath.) "Oh, God, I never harmed anything, man, woman or child."

Who said you did? "Oh, oh, oh, I ain't done nothing—oh—oh—I wouldn't harm man, woman, or child —oh—it comes out in the papers against me—oh—I wouldn't touch a fly, I wouldn't." "Look at my arms," (pulling up sleeves). "Have I harmed anything?" (Weeps and moans.) "Have I stealed anything?"

How do you feel? "Well, you know when anybody goes around they lie about me—it makes me feel bad."

How? "When I see papers and everything against me."

What about the papers? "The papers say I steal, and all like o' that—say I steal—."

I have never seen anything about you in the papers. "Just look at my arms," etc. (Bursts out weeping again.)

What do you hear? "I hear they are going to kill me."

Are you sure? "Yes, sir, I am sure of it."

This general trend of talk continued indefinitely in spite of efforts to assure him or to shake his convictions. Inasmuch as this patient had such limited interests as his home, his work and his religion, the removal of the first two by his physical illnesses left very little in life to keep up his morale. The outlook in his case was rather unfavorable in view of the fact that in his illness he developed fixed delusional ideas which were later supported by persistent hallucinations.

The prognosis is equally poor in the case of a married woman fifty-seven years old who shortly after the onset of the menopause gradually became seclusive, suspicious, tense and melancholic. She was much attached to her father, hated her step-mother, was always indifferent to marital relations, did not want children and had none. She loved luxury, dressed stylishly but worried about her clothes. Although extremely matter-of-fact, she liked to be the boss and is said to have excelled in managing funerals. A sister who had many similar traits had committed suicide by jumping out of a window and the patient had twice tried to end her life in the same way.

At the time of her admission her behavior varied abruptly from immobility with a blank stare to a condition of great agitation. She admitted that she heard voices and saw visions but would not discuss them. Suddenly without provocation she would cry out in an exasperated voice, "I can't bear it. I must have my clothes. Oh, I can't. I can't bear it. Who do, why, why do I? You wouldn't like it. You wouldn't like it. I can't stand it. I can't

stand it. People all stare at me, try to make me do things. It's a perfect hell."

Three years after the onset of her illness she was still quite agitated and very talkative. Her trend of thought had become bizarre and grandiose. She had practically lost her own identity and was expressing the following ideas of amalgamation with the universe. "I have ruined your whole universe. I have bodies pulped into mine. They have got me excited and made me drink tomato catsup. I swallowed elastic bands. My hair has been torn off. You will have to unpulp me. I am making up bodies. Everything is mixed and twisted. I have been running the earth for years. I will do anything to atone. The nurse comes and makes me drink the sky. Bodies are grown into mine. I have grown into the atmosphere. The longer I lie here the worse it's becoming. The sky, the moon, the stars, everything is ruined through me. It all started hundreds and hundreds of years ago."

# DISCUSSION<sup>22</sup>

It might appear from the descriptions of psychoses given thus far that their essential features are easily recognized and that a plausible explanation of their genesis can be ascertained without much difficulty. As a matter of fact there has been considerable simplification in the presentation so that the more elementary facts might not be obscured by the complexities of reality. The intermingling of hereditary tendencies, environmental influences and personal strivings during the many years prior to the onset of a psychosis gives rise to an infinite variety of personality traits as well as the tendencies to abnormal reactions. Each patient is an individual problem requiring intensive study before even the more simple conclusions can be safely drawn. A little experience soon makes it evident that typical cases are rare and that the psychiatrist must deal with many factors not apparent on the surface.

One of the necessary stages in scientific progress is the accurate description of phenomena presented to the observer. This stage was late in arriving for psychiatry and we are perhaps inclined to linger too long. Some of us wish to inquire further into the nature of the illnesses observed with the hope that a better understanding may be obtained.

<sup>22</sup> For a comprehensive study of affective psychoses see Manic-depressive Psychosis, Proc. Assoc. Research Nervous and Mental Disease, Vol. II.

Careful study of patients having affective psychoses reveals the fact that they are fundamentally insecure and that their insecurity is related to conflicting feelings of affection and hatred. The conflict may be traced to the period in life when the parents, especially the mother, were ideal beings, the unfailing sources of food, comfort, affection and protection. Disillusionment is certain but the failure to continue as ideal beings may be conspicuous and the child may develop a feeling of resentment or hatred while clinging to what remains of the early ideal relationship. Under these circumstances both the parents and the child labor under the stress of conflicting or ambivalent feelings. Moreover the conflict is often extended to adult relationships in which the husband or wife is emotionally substituted for the parent. It may be intensified through having children who revive early associations and who add the responsibility for their problems. If the conflict is excessive or the person is fundamentally unstable a compromise may take the form of a psychosis. Rebellion against the conventional emotional ties is accomplished in a manic attack in which reality loses much of its original value and the patient is free to play with what ordinarily demands continuous and serious consideration. Submission in the form of depression may be accompanied by self condemnation but it is also an exquisite form of torture for the family and especially the parents. The depressed patient not only punishes himself for his hypocrisy but also those who failed him and were responsible for his disillusionment.

If either of these extreme deviations in the emotional state should solve underlying problems the illness need not be regarded as more than a temporary disability but unfortunately a rhythmic pattern of living may be established. The illness itself adds to the underlying insecurity and therefore to the tendency to react excessively to whatever stresses may be present. A manic attack affords temporary release of emotional tension but it is expressed in conduct which will later be regretted and which may furnish additional material for self condemnation. On the other hand the recovery from a state of depression is likely to carry with it the vigor and exuberance of springtime, a re-awakening from a nightmare existence but to a reality which may again be overwhelming.

It has been represented that a personality disorder affords an easier solution of life's problems by permitting the affected person to take advantage of more simple modes of adjustment between himself and his environment. If this is true much should be found in the

affective psychoses that resembles the characteristics of earlier stages in development. Not only must the early life of the individual be considered but since each person reproduces the evolution of the race one must also study the characteristics of primitive people.

Among the first functions to be impaired in the manic phase is the capacity for deliberation and the ability to arrive at conservative logical conclusions. It has been seen that these functions appear late and often imperfectly in personal development. One also finds that the simplest reflection is intolerably fatiguing to primitive man,<sup>23</sup> that his thoughts lack coherence and that he is occupied with a series of details or episodes which are not coordinated with any central idea.<sup>24</sup>

Instead of being occupied with abstract and deliberate thinking the manic patient gives expression to a flood of ideas which are only superficially associated and which are often highly colored by feeling. The same is characteristic of children and of primitive individuals.<sup>25</sup> They too pass easily from one notion to another under the stimulus of sense impression rather than that of logic.<sup>26</sup>

When the manic patient is so driven by an access of feeling that he is unable to express the constant flux of images or sense impressions by more than a phrase, word or sound, his speech has many resemblances to that of the child who is enjoying the thrills of his first vocal expressions and to that of primitive man whose rudimentary speech consists of isolated words or sounds, each dependent upon a sense impression.<sup>27</sup>

In like manner the increase in general motor activity of the manic patient manifested by running, jumping, dancing and singing corresponds to the normal behavior of the happy child and suggests the pleasure which the primitive derives from a repetition of rather simple, rhythmic movements<sup>28</sup> rather than from contemplation.

Even the untidy habits of the more excited patients are not unlike those of the infant who delights in smearing and of the primitive who finds in bodily excretions a wealth of magic properties.<sup>29</sup>

- <sup>23</sup> Lévy-Bruhl, L.: La mentalité primitive, Paris, 1925.
- <sup>24</sup> Van der Leeuw, G.: La structure de la mentalité primitive, Paris, 1928, p. 2.
  - <sup>25</sup> Van der Leeuw: Op. cit., p. 14.
  - <sup>26</sup> Murphy, John: Primitive Man, London, 1927, pp. 75, 78.
  - <sup>27</sup> Kretschmer, Ernst: Medizinische Psychologie, Leipzig, 1926, p. 65.
  - <sup>28</sup> Kretschmer, E.: Op. cit., p. 72.
  - <sup>29</sup> Bourke, John G.: Scatalogic Rites of All Nations, Washington, 1891.

The depressive phase of affective psychoses does not so readily suggest a reversion to earlier stages in development. Yet in child-hood we are thwarted by rather simple obstacles, we live in a state of dependence and tears are shed on slight provocation. Most of us commit sufficient errors to keep our sense of guilt alive and penitent feelings are likewise common. When our sins become so grievous that the environment assumes an aggressive attitude we seek refuge in the mercy of our parents or cringe before impending punishment just as the primitive crouches in the presence of an overwhelming power, resorting to propitiation and supplication or, if this seems of no avail, resigning himself to annihilation.<sup>30</sup>

In the more profound depressive reactions which have the painful aspects of a nightmare the patient is almost invariably occupied with thoughts of death<sup>31</sup> and one can visualize the primitive, paralyzed by fright or, utterly hopeless, resigned to fate. It is also possible to imagine the patient wishing to return to the intrauterine state in his own development in which all desires were immediately gratified, the environment was one of warmth and comfort and the cares and anxieties of the adult were not yet perceived.

The wish to die is very near the surface with all who have been thwarted in life and it is not surprising that suicidal impulses are common when the morale is undermined by depression. Death is still welcomed by many pagans who look forward to a higher form of existence, suicide was approved by many of the older philosophers and it is only a few centuries since the Christian church has decreed suicide to be utterly unlawful.<sup>32</sup>

Many depressed patients believe that there is not enough food for all to partake, that they are unworthy of food or that they are to be starved as a punishment for their sins. Some form of fasting as a penitent measure is incorporated in all relgious faiths and the primitive deprives himself of food in connection with magic rites and ceremonies arising from a sense of guilt.<sup>33</sup>

According to some of the more recent psychoanalytic formulations

<sup>30</sup> Murphy, John: Op. cit. p. 222.

Westermarck, Edward: The Origin and Development of Moral Ideas, London, 1906, Vol. II, p. 361.

<sup>&</sup>lt;sup>31</sup> MacCurdy, John T.: The Psychology of Emotion, Morbid and Normal, London, 1925, pp. 108-133.

<sup>&</sup>lt;sup>32</sup> Westermarck, E.: Op. cit., Vol. II, p. 252.

<sup>33</sup> Westermarck, E.: Op. cit. Vol. II, pp. 292-336.

an individual who is subject to mood disorders is interested in another person (love-object) largely for selfish (narcissistic) purposes. Such a narcissistic love is characterized by ambivalence, i.e., it is pervaded by diametrically opposed feelings of love and hate for the love object.

In sickness there is a regression to the nursing stage of oralnarcissistic bliss in which a display of rage brings the mother and the gratification of the craving for nourishment. When the love-object finally ceases to respond to the individual's narcissistic demands the feeling of hate prevails. In the attempt to destroy the love-object it is devoured and at the same time regained through the process of introjection. In the meantime the individual is troubled by his conscience (super-ego) which directs the feeling of hate upon the ego. In childhood self punishment quickly won forgiveness from the parents but the super-ego is extremely cruel and seizes upon this opportunity to chastise the ego. Self torment is therefore prolonged and apparently without avail.<sup>34</sup>

Eventually full atonement is made, the love-object is expelled and the individual once more eagerly turns his libido to the outer world. With this liberation the individual may celebrate his triumph over the love-object in the form of a manic attack.

In support of this formulation it is related that according to an archaic form of mourning rite the dead person was eaten by the survivors. After a period of mourning there was a symbolic killing followed by eating of the dead person but this time with evident pleasure. Manic-depressive attacks are therefore looked upon as survivals of these archaic mourning customs.<sup>35</sup>

However plausible these analogies and theories may be the conception of psychoses as regressions to earlier and more simple levels of adaptation is inadequate especially when dealing with depressions. Loss of appetite, complaints of indigestion and constipation, and especially the so-called hypochondriacal delusions have been considered to be largely the constructions of the patient's imagination.

<sup>&</sup>lt;sup>34</sup> Zilboorg, G.: Depressive reactions related to parenthood, Amer. Jour. Psychiat., 10: 927.

<sup>&</sup>lt;sup>35</sup> Freud, S.: Mourning and Melancholia, Collected Papers, London, 1924–25, Vol. IV.

Abraham, K.: Selected Papers on Psycho-analysis, London, 1927, pp. 418-480.

Rado, S.: The problem of melancholia, Internat. Jour. Psycho-analysis, 9: 420.

It is now recognized that the patient is by these complaints accurately describing the subjective experiences accompanying actual physiological changes within himself. It has been demonstrated for instance that 68 per cent of the depressed patients require longer than five days to eliminate waste products from the colon while the hypomanic requires only forty-eight hours. This of course is only an index of the changes which occur in all vegetative functions and further evidence that an affective psychosis means an alteration in which the entire individual participates.

Both clinical and laboratory studies tend to show that slight variations in mood are well tolerated but that as emotional reactions become excessive or painful there is corresponding disturbance in physiological processes. As the manic excitement increases a state of physical exhaustion is approached and the more extreme depressions are also attended with obvious physical changes. In a group of thirty-five patients in a state of stuporous depression twenty-eight had a nearly constant fever varying from 99° to 101°. Even such gross tests as basal metabolism register an acceleration of metabolic processes during the manic phase and a retardation during the depressive phase. 38

Many studies have been made of the relation of physical constitution to affective psychoses. It has been shown that more than 50 per cent of the patients suffering from these psychoses are of the pyknic type,<sup>39</sup> i.e., they have a round head, short, thick neck, barrelshaped trunk and relatively short extremities. We are permitted to conclude therefore that an individual of the pyknic type is predisposed to an affective psychosis rather than to some other form of personality disorder.

<sup>37</sup> Hoch, August: Benign Stupors, N. Y., 1921, p. 241.

39 Kretschmer, Ernst: Physique and Character, New York, 1925.

<sup>&</sup>lt;sup>36</sup> Henry, G. W.: Gastrointestinal motor functions in manic-depressive psychoses, Amer. Jour. Psychiat., 11: 19.

<sup>&</sup>lt;sup>38</sup> Henry, G. W.: Basal metabolism and emotional states, Jour. Nerv. and Ment. Dis., 70: 598.

Wertheimer, F. I. and Hesketh, F. E.: The Significance of the Physical Constitution in Mental Disease, Baltimore, 1926.

# CHAPTER V

# PARANOIA AND PARANOID PSYCHOSES

Definition. Paranoia is a form of personality disorder which is characterized by the formation of fixed and systematized delusions. Paranoid psychoses resemble paranoia except that the delusions are transient. Paranoid psychoses are commonly known as paranoid conditions or states and they are frequently associated with other illnesses.

Frequency. They constitute less than five per cent of all psychoses. Many paranoics are at large in the community, able to conceal their eccentricities or at least to avoid coming in conflict with the law. Often they are first recognized after they have committed a crime. They are then likely to be sent to a penal institution or to a special hospital for psychotic criminals. Paranoia is much less common than paranoid psychoses. Men are somewhat more often affected than women. The definite onset of symptoms usually occurs between the ages of twenty-five and forty.

Causes. In a large proportion of the cases there seem to be hereditary tendencies. Alcoholic excess is an occasional contributing factor. Abnormal personalities are found in most cases. There is often an inherent weakness or defect concerning which the individual is very sensitive. This weakness may be that seen in sexually immature individuals who have homosexual cravings¹ or tendencies to other sexual perversions. Often he is a highly moral person whose sexual outlets have been greatly restricted. He has avoided or made only feeble attempts at mature heterosexual adjustment. On account of such deficiencies the individual is likely to develop an uncomfortable feeling that he is different from the average healthy normal person. This causes him to feel insecure or to have what is called a feeling of inferiority. If he is proud and sensitive his self esteem does not permit him frankly to recognize a personal weakness. In attempting to disguise this inferiority and to protect his

<sup>&</sup>lt;sup>1</sup> Brill, A. A.: Homoerotism and paranoia, Amer. Jour. Psychiat., 13: 957.

own feelings he makes a constant effort to represent himself as being the opposite, a person of superior capacities. In other words, such a handicapped individual is constantly trying to accomplish that which is only possible for the normal or even the superior type of person. Quite naturally the results are repeated failures. But the responsibility for failure cannot be acknowledged and there is an increasing tendency to blame other people or agents for the failures. He claims that failure is due to lack of a fair chance or even to definite efforts on the part of others to hinder his progress. Such is the evolution of a paranoid type of personality. It is one in which there is an abnormal tendency to transfer to others the responsibility for personal difficulties or failures. With such limitations the struggle to survive the ordinary vicissitudes of life often proves too great and paranoid tendencies tend to be accentuated beyond normal limits.

## PARANOIC PSYCHOSES

These psychoses usually develop insidiously. Early in life the paranoic is inclined to be quiet, reserved, shy, self conscious and lacking in self confidence but at the same time he may be sensitive, proud, determined, ambitious, selfish and unusually intelligent. As he approaches the complexities and responsibilities of adult life there is increasing conflict with the environment. Along with this comes a tendency to feel that the environment is at fault. He becomes irritable, querulous, aggressive or is constantly on the defensive. In other words he is known as an "eccentric" individual. Further disappointments and failures lead to distrust of the environment or to suspiciousness. This in turn leads to the conclusion that the environment is always unfair. He is inclined to feel that others are hostile in their attitude and that they lose no opportunity to make uncomplimentary remarks about him. He is then said to have ideas of self reference. This process may be elaborated until there is an unalterable conviction that certain or all persons or their agents are engaged in efforts hostile to his welfare. In short, the delusions then become systematized. At the same time there is an increasing tendency to review the past and to place delusional interpretations upon ordinary events, even to the extent of creating false memories of them. This process is usually referred to as retrospective falsification. Especially during acute periods of the psychosis there may be hallucinations of hearing which are often unpleasant in nature and

which lend support to the delusional interpretation. At the final stage in the struggle for the preservation of self esteem and a feeling of superiority the conviction that he has been persecuted is used as a basis for further delusions of self importance and grandeur. In other words, the paranoic may arrive at the conclusion that he has been persecuted because other people are envious of him. He may become so self satisfied and so convinced of his superiority that he is less antagonistic and vindictive and he may even be amused by what he then considers futile efforts to persecute him. In this stage of his paranoic development he may assume an attitude of benevolent tolerance. This transformation of personality may cause the patient to deny his former relationships and to proclaim himself a high official, a ruler, prophet or even a deity.

Clinical manifestations. According to the prominence of certain types of delusions several types of paranoics have been described.

Persecutory type. This is the most common variety. It often accompanies other types and is characterized by delusions of persecution.

Grandiose type. This is characterized by delusions of self importance. Such individuals believe they are of royal or even divine lineage.

Erotic type. This is characterized by delusions of courtship and marriage to some unattainable person, the marriage to be consummated at some indefinite time in the future. There is often ridiculous and undying devotion to the one sought. The relationship is often represented by some peculiar symbol and the affection is usually platonic in nature.

Querulous type. This is characterized by the delusion that justice cannot be obtained under the prevailing social system. Failure to attain the desired goal stimulates appeal to a higher tribunal. Ultimate failure simply strengthens the delusion.

#### PARANOID PSYCHOSES

These psychoses are called paranoid because they resemble paranoia. The personality traits of both types of affected individuals have much in common but the paranoid is more tolerant of himself and his environment. Paranoid reactions are not uncommonly observed as complications of other types of personality disorder,

especially those occurring at middle age,<sup>2</sup> and they indicate a less favorable outcome of the illness. Unless subjected to unusual stress he succeeds in making a fairly good adjustment to life's experiences. In the causation of paranoid psychoses there are contributing and often remediable factors such as infections, exhaustion or unusual environmental stresses. Suspicions are almost always present and frequently there are irritability, confusion, illusions, and hallucinations of hearing. Delusions when present are seldom well systematized, usually transient and rather plausible. The patient often doubts the correctness of his interpretations.

Course of illness. Paranoic psychoses are gradually progressive and after many years of illness may be accompanied by a slight degree of mental deterioration. There may be an apparent quiescence manifested by a "resignation to fate," or by an attempt to appear normal in order to meet the requirements necessary for release from confinement. Paranoid psychoses are almost always acute in their course, and rapid improvement and recovery often follow the removal of the contributing causes.

Prognosis. After a paranoic psychosis has become fully developed the outlook is rather poor. On account of the fact that these patients are very likely to be dangerous to other people, even to the extent of being homicidal, continual institutional care is usually necessary. If the patient receives the proper treatment before definite symptoms have developed much can be done to delay the progress of the psychosis.

As might be expected the outlook in paranoid psychoses is much better. With proper treatment improvement or recovery may ordinarily be expected in a few weeks or months. However, under circumstances similar to those which caused the psychosis, a recurrence may be expected. This is often due to failure to heed medical advice or to contact with other people who are not considerate of the patient's susceptibilities.

Excerpts from illustrative cases. A case of paranoic psychosis. The psychosis had been developing over a period of several years althought the exact duration could not be determined. The history states that at the age of forty-five the patient left a large legal practice in Germany and without adequate reason suddenly came to Amer-

<sup>&</sup>lt;sup>2</sup> Stevenson, G. H. and Montgomery, S. R.: Paranoid reaction occurring in women of middle age, Amer. Jour. Psychiat., 11: 911.

ica with his wife and five children. After this he developed persecutory delusions and as a result neglected his business, wasted his money and kept the home in a turmoil. Just before admission to the hospital he conceived the idea of offering up his family to aid his plan for the regeneration of the world. He said that he had corresponded with and was a suitor of the Queen of Spain and that he had been persecuted for a long time by the Grand Duchess of Baden and other exalted personages; that his servants had given him poison in his food; and that by means of a system of mysterious figures and symbols which he had discovered he possessed an unusual power to detect the machinations of kings, queens, duchesses and other royal personages. He had covered reams of paper with these mysterious letters and symbols. He walked the floor for long periods of time declaiming his wrongs in a loud voice. He had persecuted his sisterin-law by shouting at her in public places and he refused to eat with other members of the family.

For many years after admission to the hospital he continued to express these delusions. He probably still harbors them although he has not spoken to anyone for more than twelve years. For over ten years he insisted upon sending affectionate cablegrams and letters to the Queen of Spain and he became infuriated when his wishes were not granted. After repeated failure in having these messages forwarded he demanded that the following cablegram be sent to the Queen: "To avoid misunderstandings herewith I formally give notice to your Royal Majesty that all kind of unfair treatment by unspeakable Turks well known absolutely despicable extortion tricks hereabouts caused me the third time to resign. My correspondence now free. Informatory letter follows. Position fully upheld. Hope you in best of health and spirits. Thoughts and wishes as always."

While in a communicative mood he confided to one of the physicians that by means of his occult power and calculations he had obtained the following information: that the Duchess of Baden had caused his mother's death and for this she would be publicly hanged; that he was a descendant of Napoleon I and that the Queen of Spain had the same ancestry; that Bismarck was also a common ancestor; that the Emperor of Germany was occupying the throne which belonged to him; that the Queen of Spain had only recently come into her titles and that by the same means he would soon come into his; that his legal father was an imposter and that his real father was

actually a French nobleman. In talking about these subjects he was very much in earnest and at times he became quite excited over the imagined injustices he had experienced.

Some time later he expressed the delusions that his mother, who had died twenty-five years before, had come to life again and was coming to see him; that his wife had died and he would soon remarry. For some time he denied his identity, claimed that he was Duke Guylia and denied that he was in any way related to the other members of his family. At one time he claimed that he had been hypnotized by his persecutors and that while he was under their influence they had made an ass of him. For several months at a time he refused to eat and had to be tube fed. This refusal to eat occurred in relation to his chagrin at not being able to continue his communications with the Queen of Spain. He made no objections to being tube fed and in fact at times requested it saying that he "wanted the sensation."

After having received treatment in a hospital for more than twenty years there has been apparently a gradual tendency toward a quiescence of his psychosis. He still however shows an attitude of exaggerated self importance, a constant feeling of being ill humored, and refuses to have anything to do with his family. He slams the door, shrieks and stamps his feet when anyone comes near him. He indicates his wants by means of gestures and interjections. At the same time he is quite alert to his surroundings and shows very little evidence of mental deterioration.

This case illustrates very well the ways in which ambitions and emotional and instinctive cravings are satisfied by a psychosis. The fact that the patient believes that he is persecuted by kings, queens and duchesses in itself enormously magnifies his importance. If he were an ordinary individual he would not even be noticed by these exalted personages. Later in the development of his psychosis he becomes certain of his importance because by means of his "occult power" he learns that his real father was a French nobleman; that he himself is a distant relative of the Queen of Spain and that he would be the Emperor of Germany if it had not been for the jealousy and machinations of other exalted personages. All of this is out of harmony with the fact that he is merely a lawyer, has a not unusual wife and family and actually has a very limited amount of power or influence. The initial solution of this disharmony is seen in the beginning of his psychosis by his partial withdrawal from the immediate

family. This is shown by his abuse and refusal to eat with them. Later in the psychosis his unconscious desires are expressed in the conclusions that his wife is dead, that he is not in any way related to the members of his family and that he is really Duke Guylia. Therefore he quite naturally expects soon to "come into his titles" and to marry the Queen of Spain. It is not surprising that he is a very haughty individual and becomes infuriated when his wishes are not immediately served.

It should be said in passing that his interest in being tube fed, "wanting the sensation," suggests a revival of feeling associated with homosexual experiences or tendencies. The resurrection of his mother (the only relative whom he has not disposed of in his psychosis) restores the premarital mother-son relationship with its pleasant emotional and instinctive attractions. In short, the mother fixation, a common antecedent of homosexuality, has triumphed over the emotional ties of adult life.

Similar mechanisms are seen in a druggist, forty-six years old, who suffered from a paranoid condition. He was described as being ambitious, energetic, fairly self reliant, passively sociable, serious minded and very conscientious, and with inclinations toward jealousy, irritability and a quick temper. In general he gave the impression of being a rather harmless, insipid type of person with possibly less than ordinary intellectual ability. He was actually unsuccessful in business and finally a few years before his illness he obtained a position as clerk in a drug store belonging to a former successful classmate.

It happened that he was still a citizen of Germany at the time the United States declared war, although he had been a resident in the latter country for twenty-five years. Although he was not pro-German in his sympathies he imagined that people doubted his fidelity to the United States and suspected that he was being watched by spies. He even thought that his wife and employer were watching him. When a stranger asked him for directions on the street he misinterpreted this as being part of the work of spies. During the war he occasionally mentioned his suspicions but there were no other indications that he was not well. Nothing special was noticed until one day a sudden vexation with his wife because she could not find a collar for him caused him to announce that either he or she would have to leave the house. As his wife had no such inclinations he departed that night and for the next three months lived at a hotel.

In the meantime he continued to contribute to the support of his family and occasionally visited them. On Thanksgiving night he had a brief psychotic episode in which he was found trembling and talking in a peculiar way about "two parties spending vast sums of money upon him." At Christmas time he "seemed tired out," "looked very peculiar," and remarked one evening that "they even knew that I bought collars," as though he suspected that some one was continually watching him. About two weeks later, after he had been impatient with customers in the store, his employer suggested that he take a vacation, telling him that he had been overworked and "under mental strain." As a matter of fact he had been working unusually hard for a long time with scarcely enough time for eating and sleeping and none for recreation. An element of exhaustion undoubtedly contributed to his illness. It should be stated also that during the previous year he had been interested in a dancing teacher but only to the extent of sending her flowers and chatting with her in the store.

While in the hospital he was somewhat reserved but otherwise appeared normal. He seemed to recognize that his peculiar ideas and experiences were largely imaginary. As his physical health improved through rest, proper food, moderate amounts of exercise, recreation and occupation, there was a corresponding improvement in his mental health.

This patient represents a type of person who under ordinary circumstances might not have developed a psychosis in spite of his limitations. Under war conditions the fact that he was still a citizen of a hostile country made him feel that he was being closely watched. These conditions in addition to the stress of physical exhaustion from excessive work caused a temporary failure of adjustment between himself and his environment. Relief from these unusual stresses resulted in a return to his normal condition.

#### DISCUSSION

The conception of paranoia as a distinct form of illness is very old<sup>3</sup> and has persisted for many centuries without much change. Even in the textbooks of a quarter of a century ago people were described as having delusions in regard to some particular field of interest and

<sup>3</sup> Jelliffe, S. E.: A summary of the origins, transformations, and present-day trends of the paranoia concept, Med. Rec., 83: 599.

as being in all other respects capable of enjoying human relationships in a normal manner. Such individuals are exceedingly rare and many who in the beginning of the illness fulfill the qualifications of paranoia later show definite signs of mental deterioration.

Emphasis is placed upon the presence of delusional formation because this manifestation is usually most prominent by the time the patient comes under observation. The formation of delusions is common to all people but so long as a large group holds the same belief no serious effects are observed in the individual. The lobe of the ear was pierced originally by primitive people to ward off calamity and sometimes the ear was cut off to obviate the danger of coming under the magic influence of an enemy.<sup>4</sup> In the fifteenth century an old rooster was tried and found guilty of laying an egg which was employed by Satan and the witches to injure Christians. The counsel for the prosecution brought forth evidence which left no doubt that this rooster was a dangerous member of society and so both he and the egg were burned at the stake with great solemnity.<sup>5</sup>

Equally absurd conclusions obtain at the present time and if we were to judge the human capacity to reason on such superficial evidence we must conclude that it is exceedingly feeble.

We know however that these conclusions were really manifestations of grave fears, superstitions and mystical beliefs. The emotions of the group were so deeply involved that calm deliberation was almost impossible. The reasoning of the paranoic is likewise distorted and in addition his feelings are not shared by the group. By his own attitude he antagonizes others and he is forever confronted with the task of solving his problems in a world which is unsympathetic and sometimes hostile. His sense of guilt places him in the position of a criminal who sees in everyone a detective or possible betrayer. There is the important difference with the paranoic however that he cannot acknowledge his own fault but instead holds others entirely responsible for the repeated attempts to injure his health or jeopardize his welfare. The discipline to which his conscience may once have subjected him is now imposed by the external world. He is spared the contemplation of his own unfaithfulness by ascribing grave transgressions to others. His suspicions and delusions tend to

<sup>&</sup>lt;sup>4</sup> Frazer, J. G.: Folk-lore in the Old Testament, London, 1918. Vol. III, pp. 260-269.

<sup>&</sup>lt;sup>5</sup> Ibid., p. 441.

keep him alert so that he may be ever ready to ward off the attacks of an unfriendly world and to that extent they are defensive constructions. They are really more than that however, since they are a part of a reconstruction of the external world which makes his own life more tolerable. Whatever may happen henceforth is not his fault. He has succeeded in projecting on others his own guilt. To the extent to which this is true the formation of delusions is a healing process, a method by which the paranoic transforms the external world so that he may be relieved of his own internal disharmony. Such an insidious transformation is well portrayed in the confessions of Rousseau.

According to psychoanalytic theory the paranoic is sensitive and insecure because he has never been able to adjust to his strong homosexual tendencies. In addition he is tormented by a part (the penis) of the love-object (father) which during an aggressive, sadistic phase he devoured (introjected) and which in his unconscious remains permanently lodged in the colon. He thus retains that part of the love object which he once coveted but also the sense of guilt for having castrated his father.<sup>6</sup>

Formulations such as these do not have much clinical basis and are too simplified to have general application. With our present knowledge little more can be said than that the paranoic is a person whose emotional and psychosexual development has been arrested. He has less urge than the normal to achieve a mature heterosexual adjustment and is therefore more easily thwarted in his attempts. His homosexual tendencies are not acceptable to him. They are repressed and in illness they are projected on others. Fundamentally his feelings of guilt invite punishment but he is driven to defend himself in an aggressive, sadistic manner. His attitude alienates the affection of others and his acts provoke retaliation. He is then forced to a position of defiance and in some cases to omnipotent condescension. In this state of isolation he lives on in a kind of narcissistic existence, impervious to the suggestions and reasoning of others and satisfied with his fanciful conceptions of his own importance and with his delusional reconstructions of the external world.

<sup>&</sup>lt;sup>6</sup> Freud, S.: Certain neurotic mechanisms in jealousy, paranoia and homosexuality, Internat. Jour. Psycho-analysis, 4:1.

# CHAPTER VI

## SCHIZOPHRENIC PSYCHOSES

(DEMENTIA PRAECOX; PARERGASTIC REACTION TYPES)

Definition. A schizophrenic psychosis is a form of personality disorder which is characterized by an insidious onset, usually occurring during adolescence, and by a marked tendency toward gradual mental deterioration. The schizophrenic psychoses are commonly grouped under the general heading, dementia praecox.<sup>1</sup>

Frequency. They constitute about 25 per cent of all psychoses. Apparently males are affected slightly more frequently. The onset and acute symptoms occur most frequently between the ages of eighteen and thirty-five.<sup>2</sup> On account of the marked tendency toward chronicity over 50 per cent of the patients in public hospitals are suffering from schizophrenic psychoses.

Causes. The factor of heredity<sup>3</sup> appears to be rather unimportant probably because the illness begins early in life and before there is much opportunity for reproduction. Organic changes in the brain have been described but none of them have been found consistently or have been universally accepted as being associated with the illness.<sup>4</sup> It is probable that physiological changes accompanying the

- <sup>1</sup> May, J. V.: The dementia praecox-schizophrenic problem, Amer. Jour. Psychiat., 11:401.
  - <sup>2</sup> Potter, H. W.: Schizophrenia in children, Amer. Jour. Psychiat., 12:1253.
- <sup>3</sup> Bleuler, M.: A contribution to the problem of heredity among schizophrenics, Jour. Nerv. and Ment. Dis., 74:393.
- Johnston, D. A.: Dementia praecox in twins, Jour. Nerv. and Ment. Dis., 62:41.
- Kasanin, J.: A case of schizophrenia in only one of identical twins, Amer. Jour. Psychiat., 91:21.
- <sup>4</sup> Cheney, C. O.: A review of reported brain changes in dementia praecox, State Hospital Quart., 4: 325.
- Dunlap, C. B.: The pathology of the brain in schizophrenia, Research Publications, Assoc. Research Nerv. and Ment. Dis., 5: 371.
- Conn, J. H.: An Examination of the clinico-pathological evidence offered for the concept of dementia praecox as a specific disease entity, Amer. Jour. Psychiat., 13: 1039.

maturation of the sex function during adolescence have important causal relationships. The period of adolescence is difficult for most individuals but those who develop schizophrenic psychoses usually have additional difficulties in the form of incompatible personality traits. Such persons may lack self confidence, may be shy, sensitive, self conscious and prudish while at the same time they may also be proud, ambitious, determined and driven by strong sexual cravings.<sup>5</sup> Their pride is constantly being wounded through their sensitiveness; gratification of their ambition is being continually hampered by their shyness, self consciousness and lack of self confidence; and prudery makes it difficult for them to manage strong sexual cravings in a healthy way. Their determination to succeed increases the conflict between the potent driving forces of the personality and as the internal conflict is increased the adjustments to the environment become more difficult and inadequate. Eventually the situation becomes intolerable. The affected person can no longer attend to the interests of the environment and he begins the retreat from the harsh world of reality and self sacrifice to a world of fancy where he may dwell in self indulgence. The change is manifested by secretiveness, seclusiveness, mistrust and even indifference. As contact with the real world diminishes the patient becomes more and more preoccupied with his own fancies. This course is much easier because he can again make use of the earlier and more familiar modes of adaptation. In many respects he is enjoying once more the experiences of childhood. He is fascinated by this dream world and does not wish to be disturbed. Such a development more often takes place in what has been described as an introverted, "shut in" or or schizoid (pronounced skit-zoid) personality. An individual whose latent homosexual tendencies give rise to intense conflict

<sup>&</sup>lt;sup>5</sup> Zilboorg, G.: The dynamics of schizophrenic reactions related to pregnancy and childbirth, Amer. Jour. Psychiat., 8: 733.

Zilboorg, G.: The deeper layers of schizophrenic psychoses, Amer. Jour. Psychiat., 11:493.

<sup>&</sup>lt;sup>6</sup> Hoch, A.: Personality and psychosis, Amer. Jour. Ins., 59: 887.

<sup>&</sup>lt;sup>7</sup> Kasanin, J. and Rosen, Z. A.: Clinical variables in schizoid personalities, Arch. Neur. and Psychiat., 30: 538.

Bigelow, N. J. T.: Pre-psychotic personality of catatonic schizophrenics, Psychiat. Quart., 6:642.

Blalock, J. R.: Personality and catatonic dementia praecox, Psychiat. Quart., 6:625.

within the personality through failure to obtain some outlet in frank expression or in sublimation is especially likely to be schizoid and to develop paranoid and schizophrenic psychoses.<sup>8</sup>

Sumptoms. About one-half of the population is composed of individuals showing a predominance of schizoid traits. They are inclined to be governed by their own trend of thought and feeling even though this entails conflict with others. If the goal is chiefly that of creating something of value to society the result of activity may be some useful original work but if the person is driven more and more into a fanciful world of his own construction through failure to obtain satisfaction in the real world he becomes increasingly schizoid and less able to adjust to the real world. The point at which he may be said to be schizophrenic is somewhat arbitrary but it is marked by a withdrawal of interest from the external world and frank expression of selfish desires which are ordinarily kept repressed in the unconscious. The withdrawal is never complete for there are lingering vistas of reality and often a painful awareness of a futile struggle to maintain contact with reality. The schizophrenic psychosis is a compromise at the expense of disorganization of the personality. this disorganization there is a conglomeration of the narcissistic and infantile with fragments of the altruistic, the idealistic and the real. Feeling, thought and behavior are correspondingly dissociated and the manifestations of the illness appear bizarre and incomprehensible.9

The illness may be regarded as a process of readjustment in which reality tends more and more to be distorted in order to harmonize with fundamental desires and needs. In the acute phases of this process contact with reality is impaired by disorders of sense perception in the form of illusions and hallucinations which in large part reflect the unconscious and which contribute to the delusional reconstructions.

Among the early changes there may be preoccupation with strange bodily sensations. A young man for several years had been greatly troubled with incestuous thoughts, and the possible dire consequences of masturbation as well as passive oral relations with a girl. While

<sup>&</sup>lt;sup>8</sup> Henry, G. W.: Psychogenic and constitutional factors in homosexuality; their relation to personality disorders, Psychiat. Quart., 8:243.

<sup>&</sup>lt;sup>9</sup> Meyer, A.: The dynamic interpretation of dementia praecox, Amer. Jour. Psychology, 21: 385.

in a state of anxiety he expressed the following bizarre hypochondriacal complaints: "It seems that I look terrible. I look pale. My lips are red as though I was dead. My eyes look so funny. My heart beats so fast and I thought my face was so white. My mouth tastes so sweet and my hands sweat so. I think masturbation has weakened my mind. It seems like sparks are going in between my teeth. Maybe that's what is making my hands shake so. I get so worried. I fear that thinking about myself will harm me. Last night I died and came back to life again. My skin is so black. I feel awfully weak. I've lost my appetite. I have trembling in my stomach. My eyes are blurred. My penis is turning black and my bowels are closing up. Gosh, I'm afraid I'm slipping."

Preoccupations such as these seriously interfere with the usual social and emotional relationships and the person is introspective and withdrawn. He is unable to express himself freely because of the painful associations to many of his thoughts. Other thoughts which are largely symptomatic or defensive are expressed in a somewhat disconnected way because the associated feelings are repressed. Eventually the thoughts may lose their emotional associations and the patient may say with a smile on his face that he is going to kill someone. The content of the thought expressed is out of harmony with the facial expression (paramimia). The dissociation may be so complete that thoughts appear quite foreign and are not recognized as belonging to the patient (autochthonous ideas). This degree of disassociation is a morbid exaggeration of what has been called autistic thinking, a frank schizophrenic expression of the unconscious.

As the illness progresses the clinical manifestations change. Catatonic symptoms are usually more evident in the most acute stages and there may be admixtures of paranoid and hebephrenic symptoms. For convenience in classification and for the purpose of instruction the schizophrenic psychoses have been divided into the following types according to the prominence of certain symptoms:

<sup>10</sup> Bleuler, M.: Schizophrenia, Arch. Neur. and Psychiat., 26: 610.

<sup>&</sup>lt;sup>11</sup> Hackfield, A. W.: Crimes of unintelligible motivation as representing an initial symptom of an insidiously developing schizophrenia, Amer. Jour. Psychiat., 91:639.

<sup>12</sup> Bleuler, E.: Autistic thinking, Amer. Jour. Ins., 69:873.

#### CATATONIC TYPE

This form is manifested by peculiarities of psychomotor functions. 13 As a rule the symptoms appear and disappear more quickly than in other forms. The symptoms are most evident while the patient is in an excited or stuporous phase. These phases or states are referred to respectively as conditions of catatonic excitement and catatonic stupor. In the excited phase the total amount of psychomotor activity is increased above normal. It consists of impulsive, odd, sterotyped behavior which is sometimes associated with vivid hallucinations. In the stuporous phase the total amount of psychomotor activity is definitely less than normal. In the more marked stuporous conditions the patient lies in bed motionless with eves open or closed in a state in which there is no apparent contact with the surroundings. Catatonic conditions are characterized by a great variety of peculiar psychomotor manifestations. There appears to be a lack of coordination between the motor and sensory functions. In one form of this disorder there may be marked muscular tension and automatic resistance to any suggestion (negativism). In another form the patient may be abnormally suggestible and as a result he presents such odd behavior as the automatic repetition of speech (echolalia) and of movements (echopraxia). The patient may even allow the tongue to be pricked repeatedly with a pin. common symptoms are the spontaneous assumption and maintenance of peculiar postures (attitudinizing), sudden interruptions in speech which leave a phrase or sentence incompleted (blocking), cessation of speaking (mutism) and of eating. Frequently there is a condition of muscular tension in which any movement of the extremities is automatically opposed by considerable passive resistance (cerea flexibilitas, or waxy flexibility or "lead pipe rigidity").14 This is often associated with a tendency to maintain given postures even though they may be awkward (catalepsy).

Catatonic behavior becomes much more intelligible when the trend of thought and feeling is studied. Nurses may assist in the notation of fragments which are whispered, spoken audibly and at times shouted and in the collection of writings and drawings. These productions usually reveal the motivations of behavior. Thoughts,

<sup>&</sup>lt;sup>13</sup> Hinsie, L. E.: Clinical manifestations of the catatonic form of dementia praecox, Psychiat. Quart., 6: 469.

<sup>&</sup>lt;sup>14</sup> Landis, C. et al.: Studies of catatonia, Psychiat. Quart., 8:535, 722.

impulses and hallucinated accusations of tabooed forms of sexuality<sup>15</sup> keep the patient in a state of turmoil and anxiety. If the situation becomes intolerable he may become desperately suicidal or he may escape through crucifixion, death and rebirth, experiences which to him have all the emotional value of reality.

## PARANOID TYPE

In this form delusions or ideas of persecution or grandeur are the most prominent symptoms. Especially during the acute phases of the illness hallucinations are usually present and these are most commonly auditory in nature. In the beginning of the illness the delusions may be fairly well systematized and may seem plausible. As mental deterioration progresses the delusions tend to become transient and less systematized, and they are expressed more or less as a formula with little interest or concern. As a rule the content of the hallucinations is associated with the general trend of the delusions. The hallucinations and delusions become increasingly absurd as mental deterioration progresses.

The early manifestations of this type of illness closely resemble those of paranoia and the patient's behavior has similar motivations. There is very likely to be desperate compensatory striving against yielding to forbidden desires, particularly the homosexual. Marked anxiety is commonly observed in connection with the apprehension or delusion that some mysterious, hypnotic influence is being exerted to overcome the patient's resistance to perverted sexual activity. Inability to distinguish between fantasy and reality makes it appear to the patient that he has been a victim of this influence, that he has ruined or killed others. As punishment for his misdeeds he fears that he will be tortured and killed. The intense emotional reaction to this situation is sometimes referred to as a homosexual panic. It is an acute phase in a paranoid development which is often followed by a chronic paranoid schizophrenic readjustment.

<sup>&</sup>lt;sup>15</sup> Wolff, S. C.: Thought content in catatonic dementia praecox, Psychiat. Quart., 6:504.

Helmer, R. D.: Thought content in catatonic dementia praecox, Psychiat. Quart., 6:488.

Amsden, G. S.: Mental and emotional components of the personality in schizophrenia, Proc. Assn. Research Nerv. and Ment. Dis., 5: 133.

<sup>&</sup>lt;sup>16</sup> Kempf, E. J.: Psychopathology, St. Louis, 1921, Chap. 10.

#### HEBEPHRENIC TYPE

In this form the symptoms usually appear early in adolescence. The individual becomes shy, sullen and self absorbed or irritable, obstinate, rude and assertive. As symptoms become more marked there is usually silly behavior such as inappropriate smiling, laughter, grimacing, peculiar mannerisms. This behavior is associated with peculiar, changeable, grotesque and absurd ideas. Sometimes impulsiveness and violence are manifested on slight provocation. Hallucinations are commonly present and there may be a tendency toward the formation of vague and unsystematized delusions.

The preoccupations and behavior of the hebephrenic strongly suggest that he has less urge to live at a mature heterosexual level than the catatonic or paranoid schizophrenic has. Conflict over incestuous cravings in addition to other forbidden sexual desires is resolved in passivity and resignation. In the acute phases of the illness resentment against the fate imposed by mysterious and uncontrollable forces is sometimes expressed in destructive, hostile, aggres-The feeling of futility is shown in the willingness to be castrated and to submit to passive anal relations. Early childhood interests in bodily excretions are revived and reality values are submerged in erotic, infantile fantasy. Feelings of guilt are neutralized in a depersonalization of self. The patient refers to himself in the third person and often there is a personification of the strange influences acting upon him, the projections of his own desires. During quiescent states the patient may assume a squatting or intrauterine posture, immersed in a dream-like state or smiling, giggling or grimacing in response to hallucinatory experiences.

#### SIMPLE TYPE

This form is characterized by its insidious development. Not only is the onset of symptoms specially insidious but subsequent mental deterioration proceeds gradually and imperceptibly to a condition of apathy and evident dementia. This change occurs without special emotional disorder, distorted trend of thought or the expression of delusions or hallucinations. The patient eventually appears somewhat eccentric and gradually becomes apathetic and childish.

The simple type of schizophrenic disorder strongly suggests that there is a toxic or metabolic factor in the mental deterioration underlying all schizophrenic psychoses. In the catatonic, paranoid and hebephrenic forms there are many indications of psychogenic factors in the personality disorganization but a person suffering from the simple type becomes demented without evidence of emotional conflict. Often the mental deterioration is not conspicuous and the person is able through manual labor to maintain himself in the community; or he may live as a social parasite, a vagrant or a hobo.

Course of illness. The gradual personality changes which characterize the development of these psychoses make it possible for a person with psychiatric training to find indications of the illness long before the definite onset of the symptoms. After the symptoms have presented themselves in a definite form the course of the illness is in general rather discouraging. Paranoid forms tend toward slowly increasing mental disintegration. In the hebephrenic form the deterioration is usually more rapid and profound. Catatonic stupors and excitements may alternate or persist for months or years without marked change. Ultimately there is more or less mental deterioration. In some schizophrenic psychoses the dementia may reach such a level that the individuals are described as living a merely vegetative existence, i.e., one devoid of the essential characteristics of a human being or even of an intelligent animal. On the other hand the deterioration in many cases is so slight that it is possible for the patient to live at home and be engaged in a comparatively simple occupation. In general it may be said that the degree of dementia is an indication of the extent to which the patient has been mistreated or neglected.

A complete state of dementia with emotional apathy is seldom reached although this would afford a solution of schizophrenic conflict. Such a person would be unconcerned about bodily needs or personal cleanliness and he would have lost all interest in social contacts. This was approximated in an old man who said he was a million years old, who was content to sit all day unoccupied and who had to be spoon-fed and cared for like an infant.

Prognosis. The outlook is at least fair if the patient is given the proper kind of treatment before the illness is established. After the definite onset of symptoms the outlook in the hebephrenic and simple forms is rather unfavorable. In the paranoid forms the deterioration in many cases is not marked and the individual may be able to make a fairly satisfactory readjustment. Catatonic forms are especially prone to remissions and even apparent recovery during the early

stages of the illness. In the hebephrenic, paranoid and catatonic types the presence of obvious affective disorders makes the prognosis more favorable. There are undoubtedly many recoveries in cases which have presented fairly typical symptoms of schizophrenic psychoses. In any case the outlook is favorable to the extent to which intelligent effort is directed toward maintaining the normal interests and activities of the patient.<sup>17</sup>

Excerpts from illustrative cases. 18 The large number of chronic schizophrenic patients in state hospitals is likely to give the impression that this type of illness makes it impossible for an affected person to maintain himself outside of a hospital. As a matter of fact there are probably just as many schizophrenics with mild forms of the disorder, living in the community as there are patients in state hospitals. Mild forms of the disorder called schizophrenic episodes are frequently observed in general practice and often the nature of the disorder is not recognized. In addition there are in the community large numbers of chronic, slightly deteriorated patients, some of whom have never been in a psychiatric hospital. Thirteen years ago I was consulted by a married Hungarian woman at that time thirty-six years of age. She complained of pains in her head and of hearing voices talking about her. For two years prior to this time she had had a feeling of pressure in her head and for six weeks she had been hearing threatening voices. She thought she was going to be killed. The voice of one man said that he wanted to kill her and the voice of another said that he wanted to save her. The voices commented upon everything that she did. Her illness had been precipitated by the stress associated with the commitment of her husband to a state hospital because he heard voices, was suspicious of everyone, morbidly jealous of his wife and had tried to hang her. He was diagnosed as a case of paranoid dementia praecox and he is still confined in a state hospital. She visited him occasionally but not in recent years because his condition seemed to upset her.

For about one year she received psychiatric treatment in the outpatient department of a general hospital. As she gained an under-

<sup>&</sup>lt;sup>17</sup> Levin, H. L.: Recovery in dementia praecox, Psychiat. Quart., 5: 476. Lewis, N. D. C. and Blanchard, E.: Clinical findings in "recovered" cases of schizophrenia, Amer. Jour. Psychiat., 11: 481.

<sup>&</sup>lt;sup>18</sup> For a detailed presentation of a case illustrative of a schizophrenic psychosis see page 247.

standing of her illness the voices became more distant and less troublesome. She was able to continue with her daily housework. Eleven years after she was first seen she returned to the hospital for the removal of a uterine tumor. During the previous five years she had not heard the voices at all. "I was well and so happy."

Three weeks before admission she was suddenly unable to void. She had begun to hear the voices again and had other disturbances of sense perception. "Since I was sick—I had a fever—I heard voices. There were old voices and new voices. I couldn't sleep. When I closed my eyes I saw such funny things, like a human sticking out his tongue. One day I couldn't open my mouth. The water tasted like Epsom salts. It was like smoke on the wall. The voices came through from the other room. Before I heard the voices I heard a blowing like the wind. I felt the bed going lower and lower as though it would slide down and then it would come up again. I wanted the door closed because I heard some kind of woman cursing me. She said, 'She eats the same meat and my baby has the same germs. She is going blind—she is rotting away—my poor baby.'"

While acutely ill she was suspicious of the nurses. "I liked to smooth my hair and I thought the nurses didn't like that." Her recovery was uneventful and within a few days she ceased to be suspicious. "I felt so good in my heart that I asked for forgiveness. The nurses and doctors are swell. God bless them!" The voices soon vanished and for the past two years she has been living with a sister and occupied with general housework.

The following brief abstracts of case records are illustrative of different types of schizophrenic psychoses. The first case was a seventeen year old boy whose illness was diagnosed as hebephrenic dementia praecox. He had always been considered exceptionally bright, had completed a four years' high school course in three years and was planning to take a law course at a university. As a child he was rather solitary and sensitive and never had any close friends. According to his mother he "hated to go out and would rather sit around and read the paper or sleep" (i.e., he had a sensitive, "shut in" or schizoid type of personality). He had indulged in self abuse frequently after the age of fourteen. This was a constant source of worry and caused him to become increasingly seclusive. At the age of sixteen his masturbation worries had increased to such an extent that he began to have fears that others could detect his habits from

his appearance (i.e., self abuse, being a source of mental conflict, accentuated his sensitive, seclusive personality and gave rise to a feeling of insecurity).

Four or five months before coming to the hospital he began to show a marked aversion for his grandmother and his youngest sister toward whom he had been very affectionate. He began to feel that people were talking about him and accusing him of immoral relations with women. He thought they accused him of having had sexual intercourse with his sister and of being the father of an illegitimate child by a little girl in the neighborhood. Whenever he saw people conversing he thought they were talking about him (ideas of reference, auditory illusions and possible hallucinations). His table manners became very crude and he was careless in his personal appearance (deterioration in habits).

On admission to the hospital he was quiet, somewhat evasive and suspicious but soon became restless, facetious and flippant. He mocked other patients and continually reiterated remarks he was hearing. Occasionally he would make incomplete and unexplained remarks such as "Birds of a feather"; "Such are the dangers of getting married"; "Too developed."

While in the hospital he became increasingly restless and facetious. His odd appearance was accentuated by his habit of staring at windows. He dashed here and there, slammed doors, mimicked the peculiarities of other patients and behaved atrociously at table. He was evasive concerning his own troubles. Three "foolish ideas" which he would not discuss were that his head was full of little rats, that lice fell out of his hair while it was being combed and that he had been sexually assaulting his two little sisters. Still later he imagined that others could read his thoughts and that some influence was controlling him. He made faces and laughed in an unexplained way.

To an inexperienced person this patient presents a combination of bizarre ideas and odd behavior. Much of it however lends itself fairly readily to explanation. His idea that people were accusing him of sexually assaulting his sisters represents one way in which a psychosis expresses repressed longings. In other words, he probably had actually harbored such thoughts and desires in regard to his sisters. Apprehensions lest these desires and thoughts obtain further expression or become known to others, together with similar apprehensions

regarding self abuse, contributed to feelings of insecurity and inferiority. Moreover, his sensitive, seclusive personality made it difficult for him to form the usual social contacts with other people. As a result he had little opportunity to correct misconceptions or to cultivate healthy interests and habits of living. In the illness his apprehensions and insecurity find further basis and expression in the belief that others are accusing him of immoral practices and that they can "read his thoughts." In this predicament some plausible explanation for his troubles is necessary. This is obtained from the belief that "some influence is controlling him." In this way he is relieved of responsibility. The blame is instead placed upon some strange influence or agent over which he has no control. This in turn places him in the position of the unfortunate person who has been imposed upon by fate and who therefore expects to receive sympathy, attention and protection.

The following are some of another patient's experiences as told by himself in the first acute episode of an illness diagnosed "paranoid dementia praecox."

"... The first signs of some kind of sickness—gave me a shock when I saw myself—I went to bed and died really the first time—the spirit and everything was gone—two hours and fifty minutes I was between death and life—always up and down—after one and a half I died and came back again from the sky—I was really dead—the spirit and everything was gone—I closed my eyes and saw myself lying in the bed—I saw a vision in the sky—one star every night—and a cross of Christ—this star was up in the clouds—I saw everything altogether in the sky—and the clouds tore and I saw a fine star, a vague star and a cross, and the clouds got together again—the first one meant come back to the world again and try to correct—I had to cry nearly fifty minutes—I couldn't help it."

Brief notes from the subsequent three cases show varying degrees of mental deterioration. After many years of a chronic schizophrenic psychosis each case presents fragments of the trend of thought and feeling expressed at the onset of the illness.

1. Sample of talk: "I shouldn't be shut up here as a lunatic. The governors of the hospital keep me here in order to get my property. I often hear females who are studying medicine, talking in the walls. They say they are trying to produce incontinence in me. My brothers are all dead and under the sod. They have been resurrected

and have portions of epidermis of other men in them. I can hear them talking in the walls sometimes."

This patient made daily verbal protest for years against detention. At the same time he made no other effort to get away and seemed quite contented to remain. Except for his peculiar ideas he would appear essentially normal to the casual observer.

2. Excerpt from a letter showing persisting paranoid trends: "Contingency Reverting to Sealed proceedings lawful legal nature adjustment settlements by council in other states territory pertaining other individuals and being ridden from Penn. and Jurisdiction or other states for the Criminal and Immoral purpose conducting such third class Practitioner Scaence White Chapel (England) proceeding at bedside sicking what is called a hore hound on patient by immoral Discourse or matter pertaining beneath the wearing apparel."

This patient was irritable, sullen and vindictive. Some of his behavior was obviously symbolic.

3. A sample of rather unintelligible notes frequently scribbled on scraps of paper: "Caterior—shine—lamboys as a man's—Ellis Island or island of correction—Stand in life—gathering bark-service direct—."

These notes illustrate not only the incoherent nature of schizophrenic language but also the creation of new words of *neologisms*.<sup>19</sup> A similar collection of incoherent spoken words is sometimes referred to as "word salad."

In spite of the apparent gross deterioration of the last patient there was no obvious disorder in his formal conduct. He was regularly employed running a power printing press and he was considered one of the most reliable workers in the shop.

#### DISCUSSION

This formal picture leaves the schizophrenic a mysterious creature. To the casual observer he may seem to have little in common with other human beings. His attitude and behavior immediately arouse a feeling of strangeness. In his physical form he is like other people but his conduct is bizarre and his language is sometimes difficult to understand. Only a short time ago his talk and behavior did not seem unusual and the change inspires awe and wonder.

<sup>19</sup> Bryan, E. L.: A study of forty cases exhibiting neologisms, Amer. Jour. Psychiat., 13:579.

If consideration of the schizophrenic is limited to the more usual mode of thinking and by our knowledge of civilized human relationships, he remains a strange being whose interests and activities we are unable to comprehend.

It has already been observed that a psychosis is a form of human adaptation through which the burdens of life are lightened and that this relief is afforded through a reversion to earlier and more simple levels of human development. But schizophrenia is an exceedingly complex type of human reaction and one must inquire carefully regarding many details before coming to any conclusions.

If attention is confined first to intellectual functions it may be possible to trace the path which the schizophrenic follows. Among the latest acquisitions of the human adult is the capacity to deal with abstract thought in a logical manner. One of the first observations which can be made of the schizophrenic is his inability to reason as others do. He talks of strange forces which are acting upon him, of peculiar changes which are taking place in his body and he is attentive to messages which seem to come from invisible people and objects. Such experiences were at one time common to all people. Primitive mentality was much less rigid than ours—it could readily combine the visible and the invisible, the natural and the supernatural. When confronted by harsh reality the primitive changed it according to fancy.<sup>20</sup>

By magic words, thoughts or ceremonies, he could surmount any obstacle but at the same time he had to be constantly alert to ward off the evil influences of unseen malevolent agents. Even in the middle ages the belief in mysterious powers drove a large proportion of the population into a crusade against Satan's evil forces and thousands of people were either exorcised of evil spirits or burned at the stake for being in league with the devil.

This intimate bond by which the primitive linked the real and the fanciful made it difficult for him to regard himself as an individual distinct from his environment and as a consequence he readily identified himself with other persons or objects. Anything might be a symbol of something else and there was little differentiation between the symbol and the object symbolized. Any evil worked upon another member or upon the totem object of the tribe was felt as a per-

<sup>&</sup>lt;sup>20</sup> Van der Leeuw, G.: La structure de la mentalité primitive, Paris, 1928, pp. 12-17.

sonal injury. When someone died the savage felt that by eating corpse-cakes he could absorb the virtues and strength of the deceased,<sup>21</sup> but he made sure that the body was covered with a tombstone to keep the ghost from walking.<sup>22</sup> It is not surprising therefore that the schizophrenic has strange means of communication with objects of his own fancy and that as if by magic he becomes ruler of the universe.

The period in life in which imagination is most lively usually passes unnoticed. Yet many can recall air castles, conversations with toys or departed playmates, and the exercise of magic power over others through some mystic ritual. Civilized people still ward off or cure illness by wearing magic belts and do violence to an outcast by burning him in effigy.

But the schizophrenic does not find a solution for his problems in this relatively simple regressive step. He does and says many things which still seem incomprehensible. His speech and his drawings still appear quite bizarre. One must then inquire further into the life of the primitive. Not only did the rudimentary speech of the primitive consist of isolated words of one syllable each representing a distinct picture but his drawings were condensations and symbolizations of parts of objects or portions of animals similar to the conglomeration of fantastic dreams. The condensed picture whether expressed by speech or drawing then might acquire magic properties. Animal forms might be represented by the simplest geometric lines and figures, a snake as a zig-zag ornament and a bat by a series of triangles, not unlike the regression of some forms of modern art with its peculiar lines and forms and its vivid contrasting colors.<sup>23</sup> The primitive and the child, like the schizophrenic, seem to derive pleasure from a monotonous repetition of form and sound, a kind of ritual which in the patient is referred to as stereotyped behavior.

Some schizophrenics mutilate themselves or calmly propose the sacrifice of someone else. The savage mutilates himself for purposes of ornamentation, to make himself appear more fierce to his enemy,

<sup>&</sup>lt;sup>21</sup> Hartland, E. S.: The Legend of Perseus, London, 1895, p. 297.

<sup>&</sup>lt;sup>22</sup> Westermarck, Edward: The Origin and Development of Moral Ideas, London, 1906, 2: 543.

<sup>&</sup>lt;sup>23</sup> Kretschmer, E.: Medizinische Psychologie, Leipzig, 1926, pp. 65-72.

Lewis, N. D. C.: Graphic Art Productions in Schizophrenia, Research Publications, Assoc. Research Nerv. and Ment. Dis., 5: 344.

Prinzhorn, H.: Bildnerei der Geisteskranken, Berlin, 1923.

to prevent the enemy from gaining control over him or as a symbol of submission.<sup>24</sup> This mutilation is sometimes regarded as a symbolization of castration. As a matter of fact the self mutilation of the external genitals is about as common with schizophrenics as was the production of eunuchs in biblical history. The sacrifice of animals and even of human beings was made in earlier times not only to appease the wrath of the gods, but to serve as companions for the dead.<sup>25</sup> The desire of the schizophrenic to sacrifice another person probably has similar motivations.

The interest which the schizophrenic shows in bodily excretions suggests that both he and the infant are repeating that stage of human development in which the primitive felt that these excretions had magic properties.<sup>26</sup> In addition, the patient and the infant are not impeded by the normal adult feelings of repulsion. Both feel free to deal with their own creations according to their impulses.

It is impossible that there could be such gross changes in the thoughts, beliefs and practices of the schizophrenic without there being underlying changes in his emotional and instinctive life. A feeling of regard for moral and ethical laws and for the customs of civilized people, the feeling of responsibility for other members of a family or a larger group, the more common sentiments and many of the more refined emotional reactions are peculiar to the mature adult.<sup>27</sup> It is to be expected that these capacities should disappear as the schizophrenic turns away from social contact to his world of seclusion and secrecy. As the schizophrenic retreats to the more simple mode of existence he soon reaches that period in childhood where tender personal feelings are not yet developed and he can speak of killing and loving with the same equanimity.

During acute episodes the schizophrenic gives expression to rather crude impulses and simple feelings which are in harmony with the content of his fantastic experiences and when the conflict ter-

Hartland, E. S.: Op. Cit., p. 277.
 Westermarck, E.: Op. Cit., 2: 544.

<sup>&</sup>lt;sup>25</sup> Westermarck, E.: Op. Cit., 1: 433.

<sup>&</sup>lt;sup>26</sup> Bourke, John G.: Scatologic Rites of All Nations, Washington, 1891, p. 230.

Hartland, E. S.: Op. Cit., pp. 237–272.

Lévy-Bruhl, L.: La mentalité primitive, Paris, 1925.

<sup>&</sup>lt;sup>27</sup> Thompson, M. K.: The Springs of Human Action, New York, 1927, pp. 104–108.

minates in a more simple form of adjustment the patient is left with rather neutral interest in the real world if not complete indifference.

To the extent that the longings of the schizophrenic are gratified by his own projections in the form of hallucinations and delusions he has no desire to maintain contact with reality. His regression however is not so simple as this might suggest. Instead of making an adjustment at some earlier level of existence his personality has disintegrated in such a way that adult interests and capacities may be closely associated with infantile modes of adaptation. Apparently mature ideas may lack their necessary emotional driving force and adequate feelings may be devoid of intelligible expression. This not only adds to the distress of the patient but it also makes the clinical picture much more complex than that of simple regression. At any given time during the course of a schizophrenic illness there may be observed certain characteristics of the original personality which survive, manifestations of the acute struggle to retain contact with reality, and evidence of readjustment in a fanciful world fashioned after the suggestions of hallucinations and the dictates of delusions.

The schizophrenic has been described as being fundamentally narcissistic and as having been especially vulnerable because of too potent affectionate fixations during the early stages of his personal development. Such a viewpoint has led to a method of classification in which the constitutional factors in the illness are merely implied and the environmental stresses are minimized. It is too often presumed that because the individual became schizophrenic he was more narcissistic than the average person.

By the end of the nineteenth century the schizophrenic disorders were accurately described and in great detail. Since then there have been at the psychologic level of integration a number of plausible formulations which have added much to our understanding. These must always be inadequate so long as clinical experience shows that a psychosis is a morbid state affecting the entire individual.

In recent years the evidence of disturbance at the physiologic level of integration has been unmistakable.<sup>28</sup> Such clinical evidence

<sup>28</sup> Kanner, L.: The occurrence of cataleptic phenomena in children, Jour. Pediatrics, 5: 330.

Hoskins, R. G.: Schizophrenia from the physiological point of view, Annals Int. Med., 7:445.

Kasanin, J.: Pavlov's theory of schizophrenia, Arch. Neur. and Psychiat., 28: 210.

as digestive disturbances, cold, clammy hands, cyanosis of dependent parts and peculiar pallor of the skin is not new. Recently there have been clinical observations suggesting an endocrine deficiency of the gonads.<sup>29</sup> Added to this are laboratory observations demonstrating pathologic changes in gastrointestinal motor functions in 70 per cent of the patients while in the acute phase of the illness.<sup>30</sup>

The catatonic stupor has been described as being similar to that of an animal paralyzed by fright or as utilizing the mechanism by which animals pass into the state of immobility in the death feint or in hibernation;<sup>31</sup> and the pathologic suggestibility as similar to the condition induced by the snake charmer. On the other hand there is definite evidence that the injection of a known toxic agent can produce a catatonic state in animals.<sup>32</sup>

Post-mortem studies made in over six hundred cases of schizophrenia suggest a constitutional deficiency in the vascular system. The average dementia praecox heart was found to be one-third less than normal in weight and the aorta was often thin, hyperelastic and of small diameter.<sup>33</sup> This hypoplasia of the cardiovascular system may however be one of the results of a life of inactivity since the average schizophrenic spends many years in a state of apathy and inactivity. Except in the acute phases both clinical observation and laboratory tests show that metabolic processes are retarded.<sup>34</sup>

Studies of the relationship of the physical constitution to the different kinds of personality disorders show that in schizophrenia the

<sup>29</sup> Gibbs, C. E.: Sex development and behavior in female patients with dementia praecox, Arch. Neurol. and Psychiat., 11:179. Sex development and behavior in male patients with dementia praecox, Arch. Neurol. and Psychiat., 9:73.

Allen, E. B. and Henry, G. W.: The relation of menstruation to personality disorders, Amer. Jour. Psychiat., 13:239.

<sup>30</sup> Henry, G. W.: Gastrointestinal motor functions in schizophrenia, Amer. Jour. Psychiat., 7:135.

<sup>31</sup> Kempf, E.: Affective-respiratory factors in catatonia, Med. Jour. and Record, 131: 181.

<sup>32</sup> De Jong, H. and Baruk, H.: La catatonie expérimentale par la bulbocapnine, Paris, 1930.

Henry, G. W.: Catatonia in birds, Psychiat. Quart., 5:68.

<sup>33</sup> Lewis, N. D. C.: The Constitutional Factors in Dementia Praecox, New York, 1923.

<sup>34</sup> Henry, G. W.: Basal metabolism and emotional states, J. Nerv. and Ment. Dis., 70: 598.

asthenic and dysplastic types<sup>35</sup> are very common. The asthenic type is tall and slender, has a thin neck, a long, flat thorax, and long, lean extremities. The dysplastic type is characterized by marked disproportions of the body.

It is futile at present to state that the physiologic changes may be the cause of the psychologic or vice versa. It seems more probable that whatever group of forces there may be initiating a schizophrenic process there are always changes at both the psychologic and physiologic levels of integration, that a vicious circle is established and that until the physiologic approach is better understood schizophrenia will continue to be a grave illness.

Very often the psychiatrist is held responsible for the slow progress made in dealing with the schizophrenic psychoses but as a matter of fact society has as yet made practically no provision for the study of these illnesses. Schizophrenia is a greater social menace than any other illness and yet the average citizen has scarcely heard of it. Legislatures provide inadequate funds for the mere food and lodging of the mentally ill. The physicians in the public mental hospitals are so occupied with administrative duties that they scarcely know the names of their patients. While the patient is still acutely ill he receives the necessary medical attention but otherwise nothing more than custodial care. Through mental hygiene education the general public is being acquainted with these conditions but until adequate provision is made for research into the problems of schizophrenia we must go on more or less in the steps of the physicians of the past few centuries.

<sup>35</sup> Kretschmer, E.: Physique and Character, New York, 1925. Raphael, Theophile et al.: Constitutional factors in schizophrenia, Research Publications, Assoc. for Research in Nerv. and Ment. Dis., 5: 100.

### CHAPTER VII

#### **PSYCHONEUROSES**

(Merergastic Reaction Types)

Definition. The psychoneuroses are personality disorders in which instinctive and emotional difficulties are manifested under the guise of apparently unrelated mental and physical symptoms. These disorders are closely associated with sexual malfunctions. The affected individual not only recognizes reality as such but avails himself of opportunities to call attention to his discomfort and disability, to arouse sympathy and to command the service of others. In contrast to this the psychotic patient loses his capacity to appreciate and deal with reality. From this predicament he escapes through the exaggerated emotional evaluation of reality in an affective psychosis or through the fanciful distortions, substitutions and reconstructions of a schizophrenic psychosis.

Frequency. A large proportion of patients consulting general practitioners and the majority of those receiving treatment by psychiatrists in private practice are psychoneurotic. At least one-half of the patients seen in general practice have illnesses which are in part psychoneurotic. Some authorities have estimated that the psychoneuroses are among the most common of all illnesses. Most of the illnesses reported cured by quacks, and by means of diet fads, patent medicines and faith cures belong to the general group of psychoneuroses. Owing to the nature of the symptoms, only a very small proportion of psychoneurotic patients seek treatment in state hospitals. On account of this and the wide distribution of psychoneurotic disorders a statistical evaluation of their frequency cannot be made. These illnesses occur most frequently between puberty and middle age and are more common in females.

Causes. As the different types of psychoneuroses have different causes and symptoms it will be advantageous to consider them separately.

Neurasthenia is one of the most common forms of the psychoneu-

roses. It has been called an actual neurosis because it was believed to be due to physical causes or physiological disturbances associated with excessive sexual activity. Neurasthenic reactions do follow some purely physical illnesses and especially influenza but in the typical neurasthenic disorder there is no associated physical illness. This disorder is more often observed in persons who are self centered but who at the same time are capable of arousing and taking advantage of the sympathies of intimate associates. They often live in an environment in which petty ailments are the current topics of conversation and in childhood are saturated with neurotic personality traits. Like all personality disorders neurasthenia becomes manifest in the presence of those environmental stresses to which the individual is especially vulnerable. Some obviously trying experience or catastrophe lends plausibility to a reaction popularly called a "nervous breakdown," which may mean almost any kind of an illness but often is neurasthenia.

Closer investigation may disclose some form of excess which has been continued over a long period of time and which usually includes sexual excess. Habitual erotic day dreaming, frequent nocturnal pollutions, excessive masturbation and the sexual excesses of those recently married or of those of widely different sexual capacities are common factors in this disorder. Those individuals who are apprehensive as to the effect of sexual indulgences or who yield after a struggle and with subsequent feelings of chagrin, self reproach and loss of self respect are more susceptible to neurasthenic disorders. Not uncommonly the emotional accompaniments are more fatiguing and detrimental to health than the mere sexual excesses. A vicious circle is often established in which a person becomes increasingly occupied with sexuality and with this is associated a corresponding growth in the frequency and duration of sexual excitement. same time the person is less and less capable of having other interests or of utilizing energy in other directions. The result is a form of nervous exhaustion which is manifested by neurasthenic symptoms.

Anxiety neurosis has also been called an actual neurosis because it is manifested in the presence of a situation which causes a feeling of insecurity and anxiety. The situation may be a difficult examination, leaving home for the first time, a new business venture or the beginning of the uncertain course of matrimony. Usually the situation has many intangible elements and the inability to arrive at a solution through appropriate action contributes to increasing feel-

ings of tension. The more the individual feels impelled to act the more likely is the anticipated futility of action to be realized. This vicious circle may lead to a state resembling panic.

Very frequently it is found that the immediate situation disguises a long period of increasing sexual tension. Unwillingness to indulge in sexual relations or the inability to obtain relief through those affectionate relations which happen to be available make failure in the struggle seem inevitable. Long engagements, enforced abstinence after habitual indulgence, coitus interruptus and disproportion between desire and potency are especially likely to lead to this type of illness. Partial relief is finally obtained through cardiac irregularities, palpitation, breathing difficulties or other bodily malfunctions.

Hysteria, a third form of psychoneurosis, usually has its origin in forbidden sexual experiences which may be real or fantasied and which occur in childhood. A strong sense of guilt which is magnified by the atmosphere of a conventional home puts an end to these experiences although the more pleasant aspect of fantasy may persist. Even these contemplations become intolerable to the sensitive, prudish individual and they are dismissed from conscious thought or are said to be repressed in the unconscious. All social relationships continue then as though sexual feelings were disgraceful and being thus completely ignored they seek expression by some devious pathway and in disguised form. Sex tension may be relieved in dream life or it may find opportunity for expression when the individual is subjected to unusual stress. To the extent to which any form of sexual expression is foreign or painful to the conscious ideals or to personal standards of conduct the manifestations appear to be dissociated from their original sources. Attacks may be provoked by any event which is associated emotionally with the earlier fantasies, by an actual physical illness or injury through which an easier pathway for the production of symptoms is established or by some emotional shock which causes the individual to flee from reality into a dreamlike state in which unconscious desires are more frankly gratified. An attack is essentially a dramatic representation in pantomime of an erotic fantasy which has been converted into anxiety regarding bodily functions or into actual bodily malfunction. By means of the symptoms the person is able to live out an experience in which forbidden pleasure is realized without feeling guilty or responsible for the consequences. The desires in the unconscious have found a way to escape the censorship of the super-ego.

Psychasthenia resembles hysteria in that both of these psychoneurotic disorders may be traced to a conflict over forbidden pleasure. The essential difference lies in the fact that the conscience of the hysterical person is intolerant of even the thought of such pleasure while the psychasthenic has an ambivalent attitude. The psychasthenic experiences strongly opposing feelings not only toward the pleasure itself but toward the idealized parent who has inculcated high moral standards of living and who is therefore responsible for feelings of shame or disgust in connection with sensual indulgences. The fact that certain pleasures have been forbidden adds to their lure and stimulates the unconscious to greater efforts in finding some means of gratifying desire.

Whatever the specific personal problems may be the feelings which accompany their solution tend to become generalized and to pervade all human relationships. Doubt as to the sincerity and integrity of an idealized loved one casts its shadow upon all that has been cherished. Apprehension lest in some unguarded moment violence may be done to the ideal established by the loved one may lead to fears which appear to have no basis. Instinctive desires may evade an ever watchful conscience through association with apparently neutral thoughts which tend to recur in spite of their incongruous, illogical nature. A sense of guilt arising from transgressions may be the basis for a personal ritual by which atonement is made.

Careful study of the lives of individuals who have developed psychoneurotic disorders indicates that they were constitutionally predisposed to such illnesses. The particular form in which the disorder manifests itself is determined largely by the type of neurotic reaction to life situations which has already been established. Attacks are often precipitated during some critical period in the life of the individual. The stress of leaving home for the first time, the added responsibility imposed by engagement and marriage, the shock of serious illness and death of a loved one may be more than a susceptible person can endure and he may then revert to a psychoneurotic mode of adaptation.

#### SYMPTOMS

#### Neurasthenia

In neurasthenia the symptoms appear to be essentially physical in nature. One of the most common characteristics of patients suffering from this type of disorder is their unusual susceptibility to both mental and physical fatigue. On this account they are prone to be irritable, to have difficulty in concentration as well as in the performance of simple routine duties. These individuals present a great variety of complaints which have little or no organic basis. Some of the more common of these are feelings of pressure in the head, headache, dizziness, black specks before the eyes, loss of appetite, indigestion, constipation, peculiar feelings in the skin, joints and abdomen, muscular strain on slight exertion and either sexual hyperexcitability or loss of sexual vigor. Usually the patient has many complaints which he describes in detail to the physician or to anyone else who listens attentively. In spite of his great distress he may not appear ill and the discrepancy often suggests a palliative therapeutic measure which may afford the patient some temporary comfort and assurance but which at the same time acts as a means of prolonging the illness. The patient quickly tires of any particular form of treatment, goes from one physician or hospital to another in search of relief, is ready to try any new remedy suggested and after a few years of rekindled hopes and successive failures he may pass into a state of chronic, neurotic invalidism. More often the patient's habitual activities are merely interrupted by an exacerbation of his illness or by prolonged courses of treatment. Sometimes the illness is so incapacitating that the patient is confined in bed for weeks.

# Anxiety Neurosis

Anxiety neurosis has as its essential symptoms morbid apprehension and anxiety. The patient is greatly concerned regarding his health even though he may realize that he has no actual physical disease. His feelings fluctuate between some degree of assurance and a dread of impending personal calamity. He is subject to periods or attacks in which these feelings become so accentuated that he is obviously in great distress. In such attacks the patient feels that something terrible is about to happen, that he has serious heart trouble or that he is "losing his mind." Even death is expected. Difficulty in breathing, a feeling of suffocation, cardiac palpitation, frequent urination and diarrhea are common. Acute attacks resemble conditions of extreme fright and are characterized by such symptoms as pallor, tremor, perspiration, palpitation, widely dilated pupils, nausea, incontinence of urine and feces and dizziness. The

patient may even lose consciousness. In these attacks the feelings ordinarily associated with making a speech for the first time in public, or with anticipated failure in business are exaggerated to a morbid degree. Attention is focused on the feelings of physical distress rather than upon the situation which may have precipitated the attack.

### Hysteria

A great variety of symptoms is found in hysterical disorders. general the symptoms consist of localized or generalized motor and sensory disturbances. These may be accompanied by confusion and at times by periods of partial or complete loss of memory. On casual observation the symptoms may appear to be manifestations of some organic disorder but closer inspection shows that they do not belong to any recognized physical illness. The symptoms include weaknesses, paralyses, contractures and peculiar postures of various parts of the body which may be accompanied by sensory disturbances in the form of increased or decreased sensitiveness (hyperesthesia, hypesthesia and anesthesia). Any situation, person or object which suggests the original and repressed experiences may precipitate an acute attack. The painful associations of this revival may be so overwhelming that the patient becomes delirious or stuporous. Acute episodes are likely to be severe in proportion to the intensity of the original repressed feelings and according to how closely the present situation resembles the past. Some of these episodes resemble psychotic conditions. Epileptiform or choreiform attacks, fugues, trances and suggestions of dual or multiple personalities are not uncommon. Since all hysterical individuals are highly suggestible the particular form which the illness assumes may be determined by the environment. Symptoms may be suggested by the physician or nurse or they may be a reproduction of the illness of another patient. Hysterical behavior is always more or less dramatic and is most likely to be manifested in sympathetic surroundings. However alarming the manifestations may appear to be they seldom result in any serious physical injury to the patient.

These symptoms belong to the clinical picture of conversion hysteria. In typical cases there is practically no anxiety and the patient may even give the impression of getting pleasure out of his

<sup>&</sup>lt;sup>1</sup> Ziegler, L. H.: Hysterical fugues, J. A. M. A., 101:571.

disability. In contrast to this there is evident distress in cases of anxiety hysteria. The intensity of the anxiety may be as great as in cases of anxiety neurosis. The feeling that some bodily function is so impaired that death may result is a common complaint.

# Psychasthenia

This disorder is characterized by morbid and obsessive doubts, fears, impulses and compulsions. Those who have morbid doubts are constantly harassed by feelings of uncertainty or are continually questioning themselves about trivial, impractical and often unanswerable problems. They may, for instance, become very troubled by doubts as to whether there is a God, or as to the reality of their parents or they may even doubt the existence of things in general. Morbid fears (phobias) include a great variety of situations or objects. Some of these are the morbid fear of dirt, infection, poisons, contamination, open or closed spaces, high places or of thunder and lightning. Obsessive impulses compel individuals to touch, steal and set fire to things. Closely associated with these are compulsions in which the individual feels that he must do over and over again certain acts, the performance of which gives only temporary relief. Such a person may feel compelled to read signs on the street and to go back to read them over again in order to be sure that none have been missed or read inaccurately. Others feel that ordinary tasks must be frequently interrupted while a stereotyped ceremony such as the counting or the repetition of certain numbers is carried out. Still others are handicapped greatly by the feeling that the hands must be washed every time anything is touched. This delayed the activities of one patient to such an extent that she was unable to complete her toilet until the middle of the afternoon. When the performance of a ceremony of this kind is delayed the patient become anxious and remains uncomfortable until the ritualistic act is completed. The performance is repeated indefinitely in spite of the fact that the patient may realize quite well the absurdity of the behavior. These illnesses may be so severe at times as to prevent the affected individuals from attending to their normal interests and activities.

### Traumatic Neurosis

Occasionally psychoneurotic disorders are precipitated by trauma. The injury itself is usually unimportant in comparison with the apprehension aroused. Sometimes there is no actual physical injury but only the emotional shock which may accompany a distressing accident. Often the extent and seriousness of an injury cannot be determined for days or weeks and during the interval of suspense the patient may too carefully scrutinize every symptom. This sudden concentration on himself together with his apprehension may accentuate his illness.

The symptoms are usually neurasthenic, hysterical or hypochon-driacal. They may develop promptly or during the course of weeks following the injury. If there is a suit for damages the symptoms may be exaggerated and some may be simulated. In such cases there is a definite tendency toward disappearance of symptoms after a satisfactory settlement has been made.

Course of illness. As these illnesses are often precipitated during periods of unusual physical and emotional stress their course is likely to be episodic. Those persons who have had unusually bad mental and physical habits and surroundings or who have marked predispositions to these disorders may present symptoms on very slight provocation, may have rather prolonged illnesses and are more likely to have recurrent episodes.

Prognosis. Contrary to the opinion of many these disorders are usually rather serious as far as permanent recovery is concerned. Not infrequently psychoneurotic symptoms may be the beginnings of psychoses which lead to mental deterioration. The majority of patients seen in private practice however are suffering from the mild forms of these disorders and they are often relieved by the more simple forms of treatment. Individual episodes may last from a few days to several years according to the seriousness of the illness and also to the kind of treatment employed. Prolonged analyses are more likely to bring permanent relief while the many startling and rapid recoveries obtained by other methods of treatment often prove to be only temporary.

#### EXCERPTS FROM ILLUSTRATIVE CASES

#### Neurasthenia

An unmarried woman thirty-six years old was seen in consultation in a general hospital. She complained of lack of interest, weakness, headaches and bilious attacks. In addition she said, "I don't seem to be able to get up and around and I have that dull pain in my back. If anything startles me it will settle in my back. It just seems to move around. I just want to get some pressure against it. When I am up and walking around I don't seem to get it so much. The weakness is there. My mental state is pretty bad. I can't get interested in anything. I try to read and I can't do it."

As a child she was fussy about her food and subject to vomiting. These tendencies and her subsequent bilious attacks may be related to the dysentery of several of her mother's family. When the patient was nine years old her mother died of dysentery.

Following her mother's death the patient was left chiefly to her own resources. Her father was irresponsible and uninterested in her problems. After puberty she never felt close to her father or brother. At sixteen she began an active social life, a continuous round of parties and dances at which she was popular. With some difficulty she managed to graduate from high school. During adolescence she was more attached to girls than boys. One of her particular girl chums has since had a "nervous breakdown" like her own.

When the patient was eighteen the housekeeper died of cancer of the intestines and the patient then assumed full responsibility for the home. Three years later sex relations were started with a young man who wanted to marry her. During the next five years she had several lovers but could not decide to marry. Then her father fell in love with a neighbor's wife who became his mistress. When this relationship became known to the patient she directed her attentions to the neighbor in such a way that he fell in love with her. She was not interested beyond teasing him and accepting his love letters, flowers and money.

With the discovery that her father had a mistress, her present illness began. This was eight years before she came to the hospital and her symptoms were exaggerations of her old complaints. They also duplicated those of a paternal aunt. Whatever benefit the patient may have derived from a series of medical treatments was more than offset by the circumstances under which she lived. Her father failed in business and then accepted an invitation to move his family into the neighbor's house.

In the meantime she had established intimate relations with another married man whom she hoped to marry. Neither her father or the neighbor accepted this man and a pregnancy with an abortion did not lessen her problems.

Three years before admission her symptoms became exaggerated when the married man announced that he would not get a divorce and leave his family to marry her. For several months she had been apprehensive that he was losing interest in her. He maintained that he was still fond of her and she yielded to his suggestion that they continue their relationship. She has since spent most of her time in bed, disillusioned, at times contemplating suicide. His attentions made it possible for her to live as a chronic, neurotic invalid.

In the hospital no physical basis was found for her complaints. In describing her bilious attacks she said, "I'd first get a dull headache over my left eye and then a terrible coated tongue and canker sores in my mouth. It would affect me mentally. I'd forget things. After eating I would lie down and I couldn't get up, just as though I was drugged. Nothing seemed to help. The doctor said it was an intestinal infection." Psychiatric treatment was offered and she was inclined to accept but her lover felt he could not undertake the expense and told her that she should "snap out of it" and look for a job.

A second case illustrates the causes and symptoms of both neurasthenia and anxiety neurosis. Previous to coming to the hospital the patient had indulged in gross sexual excesses which culminated in neurasthenic symptoms. After a period of abstinence due to hospital treatment the symptoms of an anxiety neurosis began to appear in the form of feelings of suffocation and apprehension of death. He was a married man, aged forty-two, who had indulged in sexual excesses most of his adult life and particularly during the ten years preceding his illness. His mother and two brothers were psychoneurotic. His mother was "always running to the doctor for trivial complaints and would consult several doctors for the same ailment." It was stated that the patient's chief interests in life were "success in business and the gratification of his own sensual desires." His first complaints were fatigue, difficulty in concentration and a pulling sensation in the back of his head. His illness gradually developed into a state of exhaustion in which he was unable to do anything except read the newspaper and occasionally take a short walk. After being treated at home unsuccessfully for about four months he was admitted to a psychiatric hospital in a condition of neurasthenic invalidism. Shortly before admission he insisted that a pill which he had attempted to swallow was stuck in his throat. He would not be convinced to the contrary until a physician had examined his throat and

feigned the removal of a pill. While in the hospital his constant complaints were an inordinate feeling of fatigue, even after the slightest exertion, difficulty in concentration, poor appetite, constipation and insomnia. In addition it was noticed that he was rather irritable, especially with relatives, and that he insisted upon talking continually about himself and his symptoms. He made a particular point of impressing upon others the seriousness of his condition and felt neglected and misunderstood if every detail was not given careful consideration. In spite of his representations he was found to be in good physical health and well nourished. In fact, except for his complaints and inability to make physical effort, no one would suspect that he was not in perfect health. During the first few months in the hospital he had a number of minor complaints. One night when feeling a little chilly he reached down to the end of the bed to pull up a blanket and in doing this he said he strained his back. next day he insisted upon remaining in bed on account of this disability. Some time later, after standing in front of an open window for a few minutes, he was sure that he had caught cold and he then went to bed. That night he worried a great deal, said he perspired and was surprised the next day to find that he did not have a cold. For a whole day he was very much exercised over the belief that he was unable to urinate. On investigation it was found that he had drunk no fluids during the day fearing that this belief might be correct. He actually had practically no urine in his bladder. For two or three days he was very much worried because he had drunk some slightly discolored water which caused his throat to feel parched all the way down to his stomach. One day he strained his side in reaching up to turn on an electric light and he thought that he felt electric shocks for some time afterward. On account of his complaints of constination he was given a tonic laxative. After taking one teaspoonful he begged to have the medicine changed saving that he was very sensitive to tonics and was in the habit of taking sedatives like bromide. There were frequent complaints of tingling and other peculiar sensations in the skin. He had great difficulty in getting the proper amount of covering at night. If he used a blanket he perspired profusely and if he removed it he felt chilly. After being in the hospital for several months he gradually became more apprehensive about himself even to the extent of feeling certain that he was soon going to die. For some time after admission he insisted upon having his window closed at night because he was very sensitive to drafts but as the symptoms of anxiety neurosis began to appear he felt that if the window were closed he would suffocate. This combination of symptoms caused his sleep to be very much interrupted since he had to get up several times during the night to adjust the height of the window.

Most of these complaints seem to the untrained observer to be imaginary but the patient feels that he is really ill. As a matter of fact he may be as incapacitated by this kind of illness as by any other. The fact that no obvious organic basis is found for the complaints does not make the illness any less real. This is especially true in view of the fact that some of the most serious illnesses are essentially physiological and psychological in nature.

### Anxiety Neurosis

Rather typical symptoms of anxiety neurosis are presented by a young man, aged twenty-two, who had indulged in sexual excesses from the age of fourteen until a few months after marriage at the age of twenty-one. He then became virtually abstinent because of impotence with his wife. He had had numerous psychoneurotic complaints at various times during his life. He had not felt especially ill however until one day about six months before admission to the hospital while walking on the street he suddenly felt as though his stomach had turned over. His heart began to beat rapidly and breathing became difficult. After that he had frequent attacks in which these symptoms were prominent. He had intense feelings of anxiety and apprehension, palpitation of the heart and such difficulty in breathing that he was in "perfect agony." He awoke several times in the night with the feeling that he was going to die. He had dreams every night many of which caused him to awake in terror. On admission to the hospital he did not appear especially ill but said he felt "shaky and nervous," and that there was a cloud over him. Physical examination revealed no basis for his complaints. For some time there was considerable difficulty in getting the patient to cooperate in routine treatment. He felt that he required medicinal or surgical treatment for some serious physical illness. He spent much of his time sitting apparently sad and brooding, and he seemed to be uninterested in anything outside of himself. He said that he was trying to overcome his weakness and palpitation and he insisted that there was nothing wrong with his mind.

In the case of a married woman thirty-two years old who was being treated for exophthalmic goitre the genesis and the manifestations of an anxiety neurosis with acute attacks are shown. Her history indicates that she had some thyroid disorder in connection with her three pregnancies. When she came to the hospital she was again complaining of nervousness, palpitation and loss of weight but her metabolism rate was minus three.

She was married at eighteen and within a year her first child was born. Since then she has been "nervous and run down." "Terrible quivering sensations pass over my body. I'm not cold and it's not a chill but I can't control myself."

Two years ago she was pregnant for the third time and her husband was then unemployed. "It worried me an awful lot. I couldn't give my children the milk they required. I used to keep asking, 'Will I ever live to see the child?' I just thought I was done for. During the first two months I lost twenty pounds from vomiting."

Since this child was born she has had no sexual desire. "I wanted to be left alone. It annoyed me—made me more nervous. Two months ago I collapsed and for the past two weeks I had an almost total collapse every day. It was too much to take care of three boys. I'll be doing something and a feeling comes over me and I have to drop everything. My heart palpitates for at least two hours and if I lie down it's worse. I keep walking and shake all over and I can't get my breath. Some days between spells I'm all right. It's just a sort of anxiety that comes over me, I'm really never at ease. Lately I've just lost control of everything and I've lost interest in everything. I go to the theatre but I can't stand noise. The louder they play the more I feel like screaming."

Several months later she returned to the hospital following a severe anxiety attack. "I was lying in bed and had to get up immediately. For about an hour I just felt as though I was choking to death. I thought I would never come out of that spell. It was a terrible experience. I had been in bed about ten minutes and at half past nine I had to call my husband. It came on suddenly. I first noticed a sort of pressure at the back of my neck and then it seemed to work around to my whole throat. I couldn't get a full breath. It was just as though everything was pushing right up. I sat in the chair and tried to relax. The more I walked the worse I got. I felt sorry for my husband. He tried to calm me. The more he came near me

the worse I felt. He tried to reason with me. He was very worried. It scared him terribly. He called the doctor twice but couldn't get him. I just couldn't feel myself. I didn't know what I was doing. I seemed to get very white. I stayed that way until it passed. I started to tremble from head to foot. My teeth chattered. I went to the window for air. I seemed all choked up. I didn't want anyone near me. I had a feeling of pressure and of pins and needles. It kept working around over the top of my head. At times I seemed to be in a daze. I couldn't feel myself for five or ten minutes. It just seemed as though I was going to pass out. I kept gasping for breath and the more I tried the worse I got. It was like everything was closing in on me on the inside."

As far as the patient could recall there was nothing which might have precipitated this attack. She said she had been reading a "childish story" and that a man had been visiting her husband that evening. She had just returned from a period in a convalescent hospital in the country and acknowledged that she was not anxious to return. "After the rest and quiet the confusion of the home seemed to turn me all upside down. I couldn't build up any resistance at home."

Her husband gave a similar account of the attack but added that she started to scratch his face when he tried to quiet her. Then he confidentially disclosed the background of the patient's illness. "Her mother has the same disposition—selfish, jealous, always ailing and complaining. For the last two years they haven't spoken to each other. Her father keeps pretty much to himself. He has to put up with the same thing that I do. Eight years ago my wife left me. She went on an automobile trip with another man. I didn't know where she had gone. She was away for a week and had to sell her jewelry to pay for the gasoline on the return trip. There was a lot of gossip about this and I had to stand a lot by taking her back. Several months later I had an operation. She didn't seem interested in me and in a fit of anger after I came home she shouted, 'You s. o. b., if I had known you were going to tie me down like this I would have been better off if I had stayed away when I went away.'"

"Three years later I noticed that the stationery was disappearing and I learned that she had become acquainted with another man. I held a blotter she had used in front of a mirror and it read, 'Well, I'm only young once and I'm sick and tired of this.' She had an

appointment with a dentist and I followed her. When she left his office she suddenly darted into a car that was waiting. I caught up to it and found a man in the car with her. I told her that she had better get her clothes and go but we finally let the matter drop. This affair has never been mentioned since but I know her sister keeps her stirred up all the time."

The patient did not volunteer any information about her escapades but it was possible to discuss some of her problems with her without betraying her husband's confidence. A period of rest alone on a farm where she could do as she pleased relieved the acute tension. After three months she returned to report "quite a change—I have picked up a whole lot physically and mentally." She and her husband had reached a better understanding and she was again enjoying marital relations. Three years have elapsed since then during which she has been free of symptoms.

## Conversion Hysteria

In the following hysterical illness in a girl of sixteen choreiform movements were the conspicuous symptoms. Some of the details of her personal history and dreams are given to show the disharmony between the strict home training and her apparently proper mode of living on the one hand and on the other, the instinctive and emotional indulgences which she had enjoyed over a period of several years.

This patient was at first considered to be suffering from an unusual form of chorea. About three months before admission to the hospital and during an attack of tonsilitis twitching of her right leg was noticed. This twitching gradually spread until the whole body was involved. During the next two months she had several "fainting attacks" which lasted about half an hour and which were without loss of consciousness.

Although she professed great fondness for her mother and always wrote affectionate letters to her, it was found that there had been much disagreement in the home. The mother had been very strict, thought dancing was a sin and took every precaution to see that her daughter was reared according to Puritanical standards. Shortly before the illness the mother reproved the patient and an admirer for coming home after ten o'clock at night whereupon the admirer ceased his attentions, much to the disappointment of the patient.

On admission she showed continual rhythmic body movements

consisting of elevation of the buttocks from the bed, quick extreme flexion of the legs, rotary motion of the left arm, to and fro movements of the right arm, choreiform movements of the facial muscles and occasional protrusion of the tongue. She talked clearly and her general attitude was in marked contrast to her motor symptoms. She did not appear especially concerned and at times she seemed to be enjoying her condition as well as the attention she received. Closer scrutiny of these rhythmic body movements showed that the movements of the upper extremities were similar to those used in her former occupation, i.e., tying mail bags, while those of the lower portion of the body were essentially sexual in nature.

During an analysis in which a clue was sought to her repressed emotional experiences she told of a dream which she had had six months prior to her illness and in which she was living in common law relationship with the young man who had paid her some attention. After they had lived together for two months and had indulged frequently in sexual relations she became pregnant and gave birth to a baby about four years old when it was born. Soon after this her mother came and took her home. There was considerable hesitation in telling this dream and it was noticed that during the narration the body movements were markedly increased. At first she declared that this dream was the only one of its character that she had ever had. Further analysis revealed that while at work she had day dreamed this dream several times and had indulged in other sexual day dreams frequently. Her work was rather routine and did not occupy much of her attention. These day dreams were accompanied by rhythmic movements similar to those of the lower part of the body which were observed in the illness. They gave her considerable pleasure and were followed by a feeling of weakness.

While in the hospital she had a dream in which her mother had taken a long journey and then become ill. The patient was making preparations to go to her mother but "it seemed as if I could not get ready—something prevented me. After a time I reached the station but the train was leaving just as I arrived. While I waited for a second train I talked with some friends. A second train came and I let it go by. I did not seem to care whether I got on the train or not. After I saw the second train leave me, I said, 'Oh, well, I'm not going to worry myself.' " In another dream she quarreled with her mother who then commanded her to leave the house. She often dreamed of

her brother "who had always been good to me—affectionate like my father (he had died when patient was eleven years old)—he acted more like a sweetheart to me."

With this information the symptoms, the mechanism of their development and the purpose they serve for this individual are more readily understood. It was learned that early in her life she had formed an attachment for her father while for her mother she had developed a feeling of antagonism, the conscious expression of which had never been tolerated. With the death of her father the affection was transferred to her brother. The antagonism toward her mother was increased by strict discipline and the continual interference with the normal development of her affections toward the opposite sex. In such an environment even the most natural instinctive thoughts or questions were tabooed. Nevertheless her instinctive cravings became more and more urgent in their demand for recognition and expression. The tension was relieved first in dreams, later in day dreams and finally in her illness. It is interesting to note that the crudest expression was obtained in the dream in which she lived with a young man and gave birth to a child and that in her illness the instinctive cravings had to be modified and disguised in the choreiform movements before they were allowed expression. The essential difference between the dream and the illness is that in the former there was little opportunity for conscious criticism or control of the expression of the repressed longings, whereas in the illness conscious inhibitions made such crude expression impossible. Likewise in her dreams her true instinctive relations toward members of her family were more frankly expressed than would otherwise have been possible. Her brother, for instance, was "like a sweetheart" to her (perhaps in place of the one she had lost) and, in spite of the fact that she protested fondness for her mother and wrote her affectionate letters, her dream shows that she had little desire to go to her even in sickness.

# Anxiety Hysteria

A married woman, twenty-four years old, was admitted to a general hospital complaining of attacks of palpitation, weakness and fear of impending disaster. "I have attacks of my heart beating fast. I thought it was thyroid. I feel very nervous and restless. It's a weird feeling. I'm so conscious of my heart. My hands get cold

and clammy and so do my feet. I'm jumpy. I'm afraid to drink anything at all, either coffee or alcohol. I have an awful time getting to sleep at night. I just toss and turn. I have more attacks on Sunday because I'm out late Saturday. I have educated myself so that I'm sure I'm not going to die in an attack but I'm in constant dread of future attacks."

Her childhood was not unusual except that she was always rather sensitive, the pet of the family and much attached to her father. At sixteen she left high school because of a romance with a military academy cadet. This proved disappointing and she then began to drink to excess. Within two years "I had a reputation of being able to drink almost anybody under the table." Her drinking appears to have been in part a rebellion against the restrictions of her father who was a total abstainer. She frankly admitted being an amorous person with strong sexual desires but she remained a virgin until her marriage three years ago.

Her first attack occurred about the time she met her husband and after a series of week-end parties. She got up early one Sunday morning to go to church. At first she felt rather gay and then "my heart started going faster and faster. I thought I had an attack of acute indigestion. I took gallons of sodium bicarb. I got terribly morbid. I thought I was going to die. They finally gave me morphine and then I was all right but every time I touched alcohol after that my heart would start going again."

She continued to have mild attacks after marriage but concealed them from her husband largely because he was unsympathetic. He did not witness an attack until after she was pregnant. "He said it was all in my mind. First my face was flushed and then I got cold all over. My mouth was full of saliva. I had a shaky feeling all over. My legs felt as though they were not attached to me. I had a feeling of constriction in my chest, especially near my heart. I went into a drug store and told them I was dying. The druggist gave me some sedative medicine. Finally I had hysterics."

This patient claimed that her marital life was satisfactory but an occasional remark showed that this was not true. "He is pretty disgusted. He's sick of having to get me pills." "My husband is very reserved. I'm the demonstrative member of the family." "He prefers the waltz and the more conservative dances. He criticizes me for being too active. I like to dance with someone who

has some zip." "I'm more active sexually and I often take the initiative. He objects that he is tired or that he has to save his energy for the next day." "I long for a condition in which I might feel calm."

While acknowledging her desire for a more free and active life than her marriage afforded she felt certain that she and her husband were well suited to each other. She explained that she needed someone who was more reserved and stable than herself. "My husband is strict in many ways like my father but my husband seems indifferent and my father was quite demonstrative." It is not unlikely that she was disappointed in trying to find in her husband a substitute for her father and that the identification interfered with marital adjustment. The consequent failure to obtain relief from tension contributed to her illness. Physical examination and laboratory tests failed to reveal organic basis for her symptoms and psychiatric treatment was advised.

### Hysterical Trance

While convalescing in a sanitarium in the country a thirty year old ballet dancer had an experience which she refers to as a collapse. She was at a dance and remembers being "horribly annoyed" because they were dancing out of time with the music. "After the dance I had just arrived at the bottom of the stairs and gave one scream and fell to the ground. Several of the girls picked me up. I remember having pain in my knees. It was a horrible effort to walk. I was taken into my room and I went to bed. I don't remember whether I undressed myself. I saw them unpacking my things and opening the bureau drawers. All I can remember is that it was very horrible and yet when I did come out of it things would strike me very funny. My sense of humor was with me."

This episode really began early in the day when she started on her journey for the country. "I took a taxicab to the station. A friend brought some of my clothing. I spoke logically but very, very slowly. On the train I was not as conscious of the speed as I usually am. When I got there I was not very conscious of my surroundings."

Her reception seems to have been somewhat of a shock to her. "The nurse gave us a lecture and told us not to bring food in our rooms because of the squirrels. I wondered if I was insane. I saw a squirrel in my room and it seemed so horrible to find it there. I

remember sitting at the table. An Irish woman who never smiled kept passing bread and nobody took any. A few minutes before I lost consciousness I was looking at myself. I looked so horrible and green without make-up. The nurse said that my knees would be weak."

"For three days I was in that state. Then I started to come out of it. I walked around and bought some cigarettes. Then I started to get a little more conscious and my spirits were excellent." She soon lapsed into the trance-like state, however, and it was three weeks before she was again fully in touch with her surroundings. "The first week seemed like nine million years and then it seemed at the end of the first week that the days were not long enough."

There was no doubt about the pleasurable aspects of this illness. "I never enjoyed myself so much in my life. I would try to help myself even in the worst part. I would say to myself, 'I guess I had better lie down.' My thoughts were so interesting—the weird sense of humor. I would lie in bed and wonder where it was going to hit me next—the jumping in my leg and then in my stomach. It was so fascinating, even in the worst part, a really dreadful fascination. It just seemed like a process I was going through—something I had to take and go through with. I had the feeling that nobody could know what it was who had not gone through it, that I had got one on the doctors—they know so much."

The pattern for this attack had been well established. She recalled that six years ago she collapsed after "doing a strenuous dance. I had just reached the wings and fell to the floor. When I got up I was so weak I couldn't walk. The doctor said there was nothing wrong." Since this "collapse" she has had similar attacks but "I never had any loss of consciousness before."

The trance-like state followed a period of unemployment which left her without funds and dependent upon charity. She felt destitute living alone in a small room. Her health was impaired because of insufficient food. Then came a period of observation in a public hospital, the consideration of a disfiguring operation and the suspense until it was found to be unnecessary. The escape to the country after "such an unhappy life had an exhilarating effect on me. I was not particularly disturbed by the experience because the minute I got it I realized what was the matter with me—the nurse had been telling me that my knees would be weak. It was the most exciting thing that has happened to me in years."

### Hysterical Fugue

Four years ago the patient, then forty-six years old, was found lying on his back on the roof of an apartment, calling for help. While attempting to install a radio aerial he had fallen from a sawhorse and received minor injuries to his back. He says that he lost consciousness for about fifteen minutes. A few days after he returned to work he was nearly run over by an automobile and he then lost all recollection of his identity and surroundings. Five weeks later he was found on the street in a dazed and markedly disheveled condition. He remained in a dazed condition for eight days and then on being suddenly awakened from a sound sleep by his small son he was able to recognize members of his family. He was unable to recall, however, anything that had happened during the period of absence from his home.

After an investigation by the State Insurance Department he was awarded \$350 in settlement of a claim for personal injuries. Nine days after this award was made and while attempting to raise a skylight he felt a sudden pain in his back. This was the beginning of a second period of amnesia during which he wandered about the streets for twenty hours before returning to his home.

Nearly a year after his accident he was again on a roof trying to repair an aerial and with no apparent cause he suddenly stopped work and disappeared. Five months later he was found wandering about the streets and returned to his family. He had no recollection of what had happened in the meantime except a vague impression that he had been on a farm.

These recurring attacks of amnesia made it possible to have his case reconsidered by the State Compensation Board. Before a settlement was reached he had three additional attacks of amnesia. During one of these he was confined in a hospital where all examinations including an encephalogram were negative. No mental abnormalities were observed except his inability to recall his name or the facts of his personal history. He was awarded a weekly allowance for total disability and \$2,200 for past compensation.

Thereafter he remained at home, unemployed and under the supervision of his relatives to prevent him from wandering. Within the past few months his case has again been reopened for consideration of permanent and total disability. He has been troubled with headaches and several times during the day he passes into a state of apathy from which it is difficult to arouse him.

On his admission to a psychiatric clinic he was found to have a spastic ptosis of the right eyelid, constant blinking of this lid, slight irregularity of the left pupil, diminution of vision in the right eye, and slight weakness of the right upper extremity. All laboratory tests were negative. He was able to give an account of his illness which was in agreement with that already related. He said he had recently been troubled with headaches in the left occipito-parietal region and that these headaches were sometimes followed by a period of sweating. "It comes when the headache passes away. I can't describe it. It seems as if I am in a fog, dazed. Then it passes off and I get this nervous spell." It feels as though all the muscles of his body twitch "but when I look at my hands and feet they don't move." He does not lose consciousness but "I walk around and don't know what I am doing." Except for the periods of amnesia and some haziness regarding events immediately following his admission his memory was unimpaired. He was correctly oriented and although he had little conception of the nature of his illness he hoped he would regain his health through the clinic treatment.

During the four months that this patient was under observation and treatment he had occasional periods of irritability during which he requested to be left alone. Otherwise he maintained a passive, coöperative attitude. On one occasion while playing ball he suddenly appeared somewhat dazed, reeled to the right and started to fall but supported himself by leaning against the wall. A slight twitching of the right side of his face and of his right arm was followed by weakness of this arm. There was also a tendency to drag his right leg. Sensation to touch and pin prick seemed absent from the entire right side. An hour later there was no evidence of these phenomena. On several other occasions there were periods of apparent apathy lasting five minutes during which he mumbled incoherently and seemed unable to answer questions.

The course of illness in this case was undoubtedly determined in part by the unsettled claim for disability. Over \$6,000 of state funds had already been spent at various times for compensation and for tests and treatment by nine specialists and for observation in six different hospitals. From state compensation and from a disability clause in an insurance policy he was receiving a total of \$24.00 a week and he had never received more than \$30.00 a week in wages. The uncommunicative and defensive attitude of his family suggested that they were not averse to a prolongation of his disability.

This case presents what appear to be multiple hysterical fugues but these manifestations are only a particular pattern by which an underlying psychoneurosis is expressed. Its onset was precipitated by an accident and its course was undoubtedly prolonged by the suspense over the outcome of the illness and over the compensation which he might receive. To the extent that emotional shock associated with injury and compensation for disability are factors in this illness it may be regarded as a traumatic neurosis or what has been recently called a compensation neurosis.<sup>2</sup>

### CASES ILLUSTRATING PSYCHASTHENIC DISORDERS

## Fear of Tuberculosis

The marked extent to which a person's life may be modified in the process of compensating for tabooed instinctive indulgences is seen in the following case of psychasthenia in a married woman, thirty-eight years of age, who for over three years before coming to the hospital had been developing a fear of tuberculosis.

This particular fear had its origin in the knowledge that her mother was ill with tuberculosis and became acute when her mother died about nine months before the patient's admission to the hospital. During the early part of her mother's illness the patient visited only when it was necessary. In the latter part of the illness she forced herself to spend most of the day with her mother but would not eat or drink in the same house. After her mother died the patient would not ride in the automobile in which her mother had sometimes ridden. She developed an aversion to fowls with crooked breast bones for fear they might have tuberculosis. She often sent them back to the market and finally ceased eating chicken in any form. Three months later she had reached a stage in her illness where she would not allow her children to leave the yard nor permit her sisters to come to her home because they had visited her mother. She took bichlorid baths and washed her head several times a day. During the last six months before admission to the hospital her behavior became definitely morbid. She banished her husband to a garret chamber because the man next to him in his office had a cough. She destroyed a great deal of personal cothing and household furnishings. She dis-

<sup>&</sup>lt;sup>2</sup> Huddleson, J. H.: Accidents, Neuroses and Compensation, Baltimore, 1932.

Kennedy, F.: Neuroses following accident, Bull. N. Y. Academy Medicine, 6:1.

carded two kitchen outfits because her cook visited the cook of a neighbor who had relatives at Saranac Lake. While at the seashore she had scenes in the hotel office because the clerk had "a lean and hungry look." There was only one store in the place where she would trade because elsewhere the clerks looked unhealthy. Hospital treatment finally became necessary.

A careful study of her life revealed that she had been very unusual since childhood. Soon after the age of five she developed an intense "love for cleanliness—was crazy about baths." She then developed scruples about things which the average child would not notice. She had morbid fears about lying, and about having broken a promise. She became very particular about her room—"everything had to be just so." She never learned to cook because "she hated to touch uncooked food" and didn't like to wash dishes "on account of an obsessive fear of dirt and grease." For many years she firmly believed that she would die at nine o'clock in the evening of her sixteenth birthday. When this time arrived she went out into the yard, sat in the moonlight and was greatly surprised to find herself still living at ten o'clock. She had always been very imaginative. For instance, from the age of six until twelve she used to hold conversations with an imaginary child who, she believed, lived over the stable. At dusk she would carry food in a basket to this child. Her parents, in order to humor her, would remove the food so that she would find the basket empty in the morning. During adolescence she was troubled with fear of rheumatism. She has always had a superstitious dread of odd numbers, especially 3, 5 and 13, and at her wedding dinner she would not sit down at the table until the fourteenth individual had been brought in from the neighborhood.

When she came to the hospital she was antagonistic and haughty in her attitude. For two days she would not eat and would not drink anything except water. She would not bathe except under coercion. For some weeks she continually did such absurd things as to air her crochet hook and clothing out of the window. She would not use the towels provided for her but would dry herself on her own clothing. She gave away her Christmas packages without opening them. She avoided other patients and nurses whom she suspected of having tuberculosis and refused to allow her sister to visit her.

Such a marked deviation from the normal habits of living must have been caused by very powerful influences. Her family history gave no clue to possible hereditary tendencies. Owing to the attitude

of her parents toward her vivid imaginings, her mental hygiene was obviously not very good. This however would not seem a sufficient cause for eccentricities beginning in childhood. Analysis of her personal habits and experiences gave the desired information. After much resistance she admitted that she had done "naughty things" as a child and that she had practised self abuse since puberty. Her comments on this were, "I don't suppose I'll ever get over the smirch of that thing." "I'm always afraid my children might inherit it." Up to this time these habits and experiences had been her own secret. On this account she had never been able to make a frank comment of this kind upon herself. Nevertheless these feelings of disgust, self contamination and self reproach, as well as the fears that her children might inherit her habits, had been actively disorganizing her personality. Their powerful effect was due not so much to the experiences and habits themselves as to the violent emotional reactions which they aroused. She also felt that all of this must be kept secret and therefore she could not avail herself of help from others but was dependent upon her own personal resources. Some adjustment had to be made between these powerful and conflicting forces within herself. Partial relief was obtained through compensation, by being unusually clean, proper and scrupulous in regard to less personal things. These were represented by "love for cleanliness," "being crazy about baths," and having a "fear of dirt and contamination." The particular fear of tuberculosis was largely accidental and due to the fact that her mother had had this disease.

The fear of contamination and the passion for cleanliness concealed personal habits which she regarded as "unclean." The fear of tuberculosis was merely an outward manifestation of a more fundamental fear that her secret habits might blemish her own life and place a stigma upon the lives of her children. Habits of excessive outward cleanliness also afforded some atonement for her hidden "unclean" habits. In addition, the superficial manifestations of personality disharmony were of such a nature that they could be expressed without feelings of self reproach whereas expression of the fundamental difficulties seemed to her impossible.

As the analysis proceeded she became aware of her real personal problems. She was encouraged and at times coerced to neglect her fears with the result that she gradually improved and at the end of a few months she was no longer obsessed by phobias.

Such a case is illustrative of the extent to which an individual may

be dominated by forces over which he has little control and of which he may be scarcely aware. He usually feels impelled to carry out with precision some ritual which in itself has little meaning. If anything delays the performance of his ceremony he feels anxious and impatient but its completion affords sufficient feeling of relief to make life tolerable until the urge to repeat comes again. His life thus becomes dominated by a succession of compulsive acts, attempts to wash away the sins of former years, usually futile because he deals only with the superficial manifestations of internal conflict.

## Phobia of Dogs

A young, unmarried mechanic has had a morbid fear of dogs since he was frightened by one in his uncle's home at the age of five. He is also afraid of cats, germs and food. He says that fear of syphilis has prevented him from having sexual relations. He is afraid of toilet seats and always washes and covers them with paper. His concern over toilet seats is not due to fear of infection but to the apprehension that there might be perspiration from others on the seat. If he touches anything unclean he feels compelled to wash his hands. Then he doubts whether they are really clean and he must wash them again and again. His doubts make him feel miserable and a ritual which he must follow in dressing, undressing and in bathing sometimes causes life to seem unbearable.

Investigation of this patient's problems revealed a morbid interest in the anal region. As a child his mother frequently gave him enemas. He recalls being frightened by an enema bag in the home of the uncle where he first became fearful of dogs. In childhood he was in the habit of smelling chairs after people had sat on them. The genitalia of a woman have never appealed to him but he has a morbid interest in a woman's rectum. When he masturbates he visualizes himself being given an enema by a woman. He has developed a ritual in regard to bowel movements which requires him to remain in a toilet for two hours.

The phobia of dogs appears to be associated with a fear of his father. At puberty he was told by his father that masturbation "weakened the mind" and since then he has not dared to use "vulgar language." For the last three years he has not spoken while his father was in the house. The father was consistently hostile in his attitude and manifested his anger by clenching and showing his

teeth. As a child the patient was especially fearful of this display of anger. It causes an unpleasant sensation of fullness in his genitals, the same as he experiences in the presence of a dog.

# Morbid Impulses to Kill

Three years ago a young married woman, after reading a tragic story of a girl killing her lover and then committing suicide, became panicky and obsessed with the idea that she wanted to kill her husband. For two years she struggled with the impulse to kill him and then confessed to him that she had this impulse. He reassured her whereupon she became obsessed with thoughts of killing herself. Because of these thoughts she tried to avoid looking at sharp instruments. She had to force herself to use kitchen knives. While the Lindbergh case was being tried she was in a state of anxiety and when Hauptmann was found guilty she felt she must tell the police that her husband was guilty. Whenever she reads of a crime she has an impulse to tell others that her husband committed it. She protests that she loves her husband and she wishes to know why she is inclined to harm him. She fears she will "go crazy" for having such thoughts and impulses.

Although such symptoms appear to be mysterious afflictions they are always a manifestation of personal conflict, of the ambivalent feelings of hostility versus affection and loyalty toward some member of the family.

In this case the motivations of the illness are obvious. The patient's early life was one of hardship but she seems to have adjusted fairly well. In her childhood there were several unsuccessful attempts made to seduce her. When she was nineteen she had sexual relations with a young man after being advised that intercourse might alleviate her dysmenorrhea. The relations were terminated when she discovered that the young man was engaged to someone else. They were not pleasurable partly because she feared pregnancy.

A year later she met her husband and after a somewhat prolonged courtship they were married. She wished to marry him in spite of the fact that he told her he had been made sterile by a wound received in the war. She claims that marital life has been satisfactory but her husband states that she is frigid and that she merely simulates pleasure in their sexual relations. He complains also that she is

jealous of him. When they attend dances she is fearful of being in a closed room<sup>3</sup> and she appears to be on the verge of fainting.

Her conflict is also manifested in her dreams. After reading a newspaper account of kidnapping she dreamed that she had called the police and was telling them her husband was the kidnapper. In a second dream on the same night she was about to commit suicide by taking a box of aspirin tablets.

After a series of interviews she disclosed the fact that since the war her husband had a child by another woman. She claims she is not jealous of this woman but she is puzzled as to how this woman became impregnated if her husband's sterility was due to a wound. She does not know that it is the result of a gonorrheal infection.

## Fear of Blushing4

A young married woman in a medical clinic complained that for ten years she had been troubled with flushing of her face. "I'm afraid to go out any more, afraid I will blush. I would do anything in the world to get rid of this. I can't seem to enjoy myself. I can't work." She has noticed that since puberty she has blushed whenever she was sexually aroused and if she feared she would be sexually aroused. The redness appears on her nose first and then spreads over her face. Her face feels warm and prickly. This vasomotor disturbance lasts ten or twenty minutes and "all of a sudden I feel it going away."

Although she has responded very little to men she had her first sexual intercourse at nineteen in the hope it might relieve her of her symptom. Three years later she was married for the same purpose but neither marriage or sexual relations had any effect. "I have thought that having a child might help but I would hate to have one for that reason." Because of her frigidity and her fear of blushing marital difficulties soon arose. She felt too self conscious to appear in public and they gradually drifted apart.

In this predicament the patient felt helpless. She could not confide in her husband regarding the painful associations with her blushing and she welcomed an opportunity to talk to a psychiatrist. In childhood she had been troubled with nightmares. When fright-

<sup>&</sup>lt;sup>3</sup> Lewin, B. D.: Claustrophobia, Psychoanalytic Quart., 4: 227.

<sup>&</sup>lt;sup>4</sup> Weiss, E.: A recovery from a fear of blushing, Psychoanalytic Quart., 2: 309.

ened she would get in bed with her parents or sleep under their bed. She often heard her father accuse her mother of being unfaithful. At first she was unable to associate anything with her present difficulty and then she mentioned a "terrible shock" which she had at the age of thirteen. She described a night spent with her father and his attempt to have sexual relations with her. She was frightened and ran and told her mother who said nothing. The affair was never mentioned again. "Ever since then I have hated him."

Shortly after this experience she began to menstruate and when her father noticed a stain on her nightgown he "made fun of me. I felt very bad about it. I felt ashamed that men knew that girls were like that. I asked my mother if men knew that and she said she didn't know instead of explaining to me. Since then I've felt guilty in thinking about anything pertaining to sex."

Because of the nature of her problems she was referred to a psychiatric clinic for treatment. Instead of following this suggestion she sought a psychoanalyst who treated her for seven months. Her condition grew worse. She became occupied with fantasies that she had had sexual intercourse with God and in fantasy she was unable to differentiate her analyst from God. Her thoughts drifted to the goddess who gave birth to a dove which she recalls as coming out of her head or her nose. With these thoughts she would get tight feelings in her head and her face would get red and warm. These subjective experiences were associated with the thought of having a child in her own head.

Sexual excitement and fear of blushing continued to be associated. Her fantasies caused her to feel that she had soiled her soul. Additional treatment by a Christian Science practitioner appears to have been equally unsuccessful. Eighteen months after she first came to the hospital she committed suicide.

# Compulsion to Pick up Small Pieces of Paper

A middle-aged man, a teacher in a boys' school, feared he had injured his back and his heart by pulling a boat into shallow water. Within a few weeks he became mildly depressed and worried about "all kinds of little things." He had to return several times to be sure that he had turned out lights and had locked doors. He made a nuisance of himself in the kitchen through his persistent attempts to have everything meticulously clean and in order. To satisfy his

desire for cleanliness he had to wash his hands excessively. His greatest problem, however, was his compulsion to pick up small pieces of paper and to step on all cigarette butts found on the street. This caused him so much embarrassment that he had to remain at home.

The doubt and anxiety over the completion of an act and the morbid desire for neatness probably had its origin in childhood. It is known that these symptoms became exaggerated following certain experiences in adult life. Ten years ago he stopped having sexual relations with his wife because he believed she was unfaithful to him. His accusations were without foundation and were really projections of his own difficulties. He had been enjoying the sympathetic attentions of several women. Within a year he had his first mild depression following a homosexual experience. After recovering from this depression he was troubled by sexual excitement on looking at crosseyed women.

His recent difficulties were precipitated by restriction of his activities in teaching. The rigid, domineering principal of the school aroused earlier associations with his father. The father's strict discipline included prohitibion of smoking. Even after marriage the patient hid his pipe when the father visited. It appears therefore that his compulsive activities are morbid attempts to destroy evidence of guilt and that they are forms of atonement for transgressions.

# Compulsive Destruction of Fingernails

A thirty year old unmarried man is worried over the condition of the first three of his fingers on each hand because the fingernails are broken to the quick. "It seems as though I have to dig after them. I take a razor blade and cut them. I break at them and pick at them with my other nails. I'm worrisome and over-scrupulous in religion. I'm a Catholic." He also thinks that his fingers are decaying and that his head and face shrink when he is constipated.

Until a few years ago this patient drank to excess and had frequent sexual intercourse. Then under the stimulus of a renewed interest in his religion he reformed. He tried to give up masturbation with only partial success. The transition was associated with increased instability and his present symptoms became obvious six months ago following the loss of his job as a clerk.

He believes that his troubles are a result of frequent masturbation and that there is semen on the ends of his fingers. As soon as the flesh around his fingernails begins to heal it starts to rot and he then has to get this flesh off. While occupied with the compulsive destruction of his fingernails he is troubled with palpitation and he has to open all the windows to get his breath. He also feels that his face is getting smaller and smaller. He often stands for hours picking at his fingers.

For short periods he devotes himself to religious observances and even wears clerical garb. He appears ecstatic and talks much of the sins of the world. Then he yields to temptation and indulges in all sorts of sex play with a young girl friend. "When I look at a pretty woman on the street the thoughts of the flesh come up and the next day I tear at my nails for having such wicked thoughts." After picking at his nails for two days he believes his face shrinks to half its normal size. A wet dream also causes his face to shrink. These bizarre, hypochondriacal symptoms indicate a schizophrenic development with which compulsive behavior is not uncommonly associated.

## Stuttering

Many cases could be presented to illustrate the different forms of compulsion neurosis<sup>5</sup> but I wish to call attention to stuttering, a very much neglected form of this neurosis. In view of the fact that the number of children having speech defects or disorders is greater than the combined total of blind, deaf and crippled children it is surprising that so little effort has been made to study and treat abnormalities of vocal expression.

A large proportion of these abnormalities are manifested in the form of stuttering,<sup>6</sup> a disorder characterized by tonic and clonic spasms which usually result in sudden and frequent interruptions of the flow of speech but which may also involve other functions of the body.<sup>7</sup> Stuttering is psychogenic in origin, usually an expression of anxiety although acute attacks of stuttering may be a part of any

<sup>&</sup>lt;sup>5</sup> An illustration of compulsion neurosis in a boy may be found in the author's Essentials of Psychopathology, pp. 204–211.

<sup>&</sup>lt;sup>6</sup> The term "stammering" is falling into disuse because it is relatively non-specific in its meaning and has been used for commercial purposes.

<sup>&</sup>lt;sup>7</sup> Greene, J. S.: The stutter-type personality and stuttering, N. Y. State Jour. Med., 36:757.

profound reaction of fear, anger, pain or affection giving rise to disturbances in breathing, tone quality and pitch of voice.<sup>8</sup> No satisfactory explanation has as yet been given for the fact that stuttering is from three to eight times more frequent with boys than with girls. There is considerable evidence that cerebral dominance is a factor in stuttering. This factor is suggested by the greater frequency of reading, writing and speech disorders<sup>9</sup> in left handed or left sided children who have been trained to use the right hand. It is likely, however, that the mere substitution of the right hand for the left in left sided persons is not sufficient in itself to give rise to stuttering but that the anxiety associated with the training in the use of the right hand may be a more important factor. Although the stuttering usually does not appear until the child enters school it may originate in the denial of preference in thumb-sucking.

Some of the complexities associated with functional speech disorders are revealed in the case of a young, unmarried man who was admitted to a psychiatric clinic because his speech disorder made it exceedingly difficult for him to adjust at home or at work. In early childhood he was troubled with digestive disturbances and constipation and occasionally he had convulsive attacks. These symptoms continued until he was four years old when they were replaced by stuttering. He was the first child and was petted and spoiled by his young, inexperienced mother. Apparently his stuttering developed gradually and was not conspicuous until after his brother was born. The patient was then seven years old, soon manifested his jealousy and had violent temper tantrums. When he would be "beside himself with rage" the mother would also become angry. realizes that she used poor judgment in dealing with him. She held him responsible for his stuttering and she used to scream at him to stop it.

The paternal grandfather was alcoholic and committed suicide. The father was obstinate, penurious, perfectionistic, a success in business but a failure in the home. Occasionally he went on alcoholic sprees. He and the patient never got along well together. He

<sup>&</sup>lt;sup>8</sup> Brown, F. W.: Stuttering: Its neurophysiological basis and probable causation, Amer. Jour. Orthopsychiat., 2: 363.

Henry, G. W.: Physiology of the brain. Its relation to disorders of speech, Proc. Amer. Soc. for the Study of Disorders of Speech, Dec. 1933.

<sup>&</sup>lt;sup>9</sup> Orton, S. T. and Gillingham, A.: Special disability in writing, Bull. Neurol. Inst., New York, 3:1.

maintained a disciplinary attitude toward the patient and employed the methods of discipline which he used in business.

The patient made good progress in school until puberty when an accentuation of his speech difficulty was associated with gradual failure in his studies. The speech disorder changed from the more common stuttering form to an involuntary pursing of the lips with interruption in speech at the beginning of every few words. This period was also marked by quarreling with his father and conflict over masturbation. It is not unlikely also that his speech difficulty was increased by his association with another boy who had a similar difficulty. Courses in speech training resulted in temporary improvement in his stuttering.

Attempts to cure him of his stuttering have failed probably because the stuttering is merely a symptom of underlying conflicts. His attachment to his mother has increased. They hug and kiss each other a good deal and he dreams of having sexual relations with her. His only love affair was with a friend of his mother's with whom he failed to have intercourse because of his impotence.

His relation to girls has always been somewhat unusual. He preferred to play with girls, wrestled with them a good deal and was always subdued by them. The struggle would be terminated by the girl sitting on his face, an act which came to be pleasurable to him. In reality and in fantasy the girl has always been the aggressor.

Toward his father he has become rebellious and distinctly hostile without being able to give frank expression to his feelings. During the past few years the patient has had short periods of mild depression during which he has fantasies of killing his father. "At those times I could empty a gun into him without any qualms at all. Sometimes when I've been at home and out of a job I've been obsessed by the idea of killing him. It seems that I have only stopped because I would get to thinking what a horrible ordeal it would be to go through a murder trial. I dread having to get up on the witness stand and talk." While depressed in this way his stuttering is more marked. It appears therefore that his speech disorder is an expression of his anxiety and that it is also an effective means of tormenting his father.

## Motor Automatisms

Stuttering probably occupies a position intermediate between the typical compulsion neuroses and motor automatisms in the form of tics and habit spasms. In the beginning a tic-like movement serves a useful purpose in that an attempt is made thereby to allay some irritation but repetition of this movement may lead to its reproduction involuntarily, without cause or purpose. Habit spasms usually involve large groups of muscles and may be associated with organic disease of the brain. Other automatisms such as the movements of the lips and tongue while cutting with a pair of scissors, the protrusion of the tongue while writing or the playing with a watch chain while speaking are not spasmodic but they may be just as involuntary and irrelevant as tics. A study¹o of automatisms in children shows that a large majority of them involve the fingers and face, and particularly the mouth. Motor automatisms suggest an underlying personality instability.

#### DISCUSSION

Ever since Beard<sup>11</sup> first described the clinical syndrome of *neuras-thenia* there has been a lack of precision in the use of this term and a tendency to include in one group many different conditions. Among the more important differentiations which have since been made was the isolation by Freud in 1895 of a disorder characterized by morbid feelings of anxiety to which he gave the name *anxiety neurosis*. Freud acknowledges that this disorder was described two years previously "with all the desired clearness and completeness" by Hecker<sup>13</sup> but no attempt was made at that time to differentiate it from neurasthenia.

The emotional reaction of anxiety is experienced in some degree by all persons. For practical purposes it is as common as the sense of guilt and the feeling of insecurity which contribute to it. Anxiety is directly or indirectly associated with all types of personality disorder. Even the manic patient may be driven to excess activity by an underlying feeling of anxiety. His boasting and his critical attitude toward others may be little more than a morbid compensation for his own feeling of inadequacy.

<sup>&</sup>lt;sup>10</sup> Seham, M. and Boardman, D. V.: A study of motor automatisms, Arch. Neurol. and Psychiat., 32:154.

<sup>&</sup>lt;sup>11</sup> Beard, G. M.: Neurasthenia, New York, 1880.

<sup>&</sup>lt;sup>12</sup> Freud, S.: Selected Papers on Hysteria and Other Psychoneuroses, New York, 1909, pp. 133-154.

<sup>&</sup>lt;sup>13</sup> Hecker: Über larvierte und abortive Angstzustände bei Neurasthenie Zentralblatt für Nervenheilkunde, Dec., 1893.

Anxiety is both a factor and a symptom in illness. It is an important factor in hyperthyroidism and in gastric ulcer. It is a most conspicuous symptom of asthma or of angina pectoris. It is an emotional reaction to what appears to be an impending calamity the nature of which is not clearly defined. Whatever the situation may be the source of the anxiety is chiefly internal, an expression of the unconscious. Anxiety is differentiated from fear in that fear is an emotional reaction to some external danger of which the person is aware. He is also impelled to attack the source of danger or to flee from it. When either anxiety or fear is overwhelming the manifestations of panic appear.<sup>14</sup>

Anxiety neuroses have been described by some writers<sup>15</sup> as including the anxiety associated with the function of some particular part of the body such as is found in a cardiac neurosis or a gastric neurosis but many prefer to include these syndromes under the heading of anxiety hysteria, a form of hysteria described by Freud<sup>16</sup> in 1908. A person suffering from this disorder is said to have remained fixed at an immature level of libidinous gratification so that even when conditions are otherwise favorable for mature sexual relationships those fixations contribute to impotence in men and frigidity in women with the result that accumulated sex tension is finally expressed in the form of anxiety and phobias. There is said to be a reversal of affect by which is meant a conscious feeling of anxiety in regard to that which is unconsciously desired. In the more common form of hysteria, technically known as conversion hysteria, the physical symptoms are symbolic of a group of repressed ideas while in anxiety hysteria the physical manifestations are a part of the anxiety just as in a case of anxiety neurosis. The feeling of anxiety is associated with a specific act or situation such as the apprehension felt in closed spaces while in anxiety neurosis the feeling of anxiety has become generalized.17 There is no essential difference in the symptomatology of

Diethelm, O.: Panic, Arch. Neurol. and Psychiat., 28: 1153.

<sup>&</sup>lt;sup>14</sup> Kempf, E. J.: The Psychology of the Acute Homosexual Panic, Psychopathology, St. Louis, 1921, Chap. 10.

Diethelm, O.: The nosological position of panic reactions, Amer. Jour. Psychiat., 13: 1295.

<sup>&</sup>lt;sup>15</sup> Stekel, W.: Conditions of Nervous Anxiety and Their Treatment, London, 1921.

Karpman, B.: Anxiety neuroses, Arch. Neurol. and Psychiat., 26: 1257.

<sup>&</sup>lt;sup>16</sup> Freud, S.: Collected Papers, London, 1924-25, 3: 257.

<sup>&</sup>lt;sup>17</sup> Jones, E.: Treatment of the Neuroses, London, 1920, pp. 174-180.

anxiety hysteria and that of the phobias described by Janet under the general heading of psychasthenia.

The conception of hysteria has always been associated in some way with the function of sexual organs. It was firmly believed by the ancient Greeks that hysteria was due to migrations of the uterus and that when it reached the thorax it might cause feelings of suffocation. In such cases the uterus was induced to retreat to its normal position by giving foul-smelling potions and by applying aromatic substances to the external genitals. Many centuries passed before this conception of hysteria began to be supplanted and there still are physicians who treat hysterical patients with foul-smelling substances.

Among the most de-sexualized of modern theories of hysteria are those of Janet who defines the illness as "a form of mental depression characterized by the retraction of the field of personal consciousness and a tendency to the dissociation and emancipation of the systems of ideas and functions that constitute personality." He states that hysteria is due to a depression or "exhaustion of the higher functions of the encephalon." As a result "consciousness" is not able to perform the more complex functions. In attempting to explain the localization of physical symptoms he says that the general enfeeblement is manifested first in those functions which have "remained weak and disturbed," in those which are the most complicated and difficult to perform and in those which were "in full activity at the moment of a great emotion."19 These conclusions are based upon a vast amount of clinical observation and experience but it is generally accepted that Janet's greatest contribution to the subject of hysteria is his excellent and complete description of hysterical phenomena.

On the other hand we are indebted to Freud for a better understanding of the nature and genesis of hysterical disorders. As both Freud and Janet were pupils of Charcot it is not unnatural that there was a similarity in the views expressed in their earlier writings. Freud spoke of psychoanalysis, complex and catharsis and Janet used the terms psychological analysis, psychological system and dissociation of fixed ideas.<sup>20</sup>

<sup>&</sup>lt;sup>18</sup> Janet, P.: The Major Symptoms of Hysteria, New York, 1929, p. 332.

<sup>&</sup>lt;sup>19</sup> Janet, P.: Op. Cit., pp. 332-337.

<sup>&</sup>lt;sup>20</sup> Janet, P.: Psychological Healing, A Historical and Clinical Study, New York, 1925, pp. 601, 602.

The importance of fixed ideas in causing hysterical disorders had been emphasized by Charcot. It was believed that an idea might act upon the body with sufficient force to alter its function, that the idea of a leg being paralyzed was sufficient to cause an hysterical paralysis. Janet still speaks of a "dissociation and emancipation of the systems of ideas."

In his early writings on hysteria Freud stated that "splitting of consciousness.... exists rudimentarily in every hysteria and that the tendency to this dissociation and with it the tendency towards the appearance of abnormal states of consciousness.... is the chief phenomenon of this neurosis." His investigations showed that "the causes of many, if not all cases of hysteria can be designated as psychic traumas." At that stage in the development of his theories it was his conviction that a passive sexual experience before puberty was essential in the etiology of hysteria and that these sexual traumas must consist in actual excitation of the genital organs. He believed that the "hysteric suffers mostly from reminiscences." 21

In 1908 Freud presented a summary of his conclusions on the nature of hysteria the gist of which was that an hysterical symptom is the realization of an unconscious fancy and that it serves as a sexual gratification, real in infantile life but since then repressed.<sup>22</sup>

There has been no important change since then in the psychoanalytic theories regarding hysteria except the acknowledgment that psychic or sexual traumas may be either actual or fantasied. Emphasis has been placed upon the emotional value of sexual experiences and the extent to which they are repressed in the unconscious when painful to the conscience. The splitting of consciousness by the hysterical gratification of unconscious desires is therefore of secondary importance and a system of ideas would be impotent except for the powerful emotional associations.

In popular conception hysteria is associated with malingering. This association is determined in part by the apparent trivality of the emotional episodes commonly called hysterical and in part by the secondary gain through hysterical disorders. It is true that with hysteria and other psychoneurotic disorders the patient by means of his symptoms escapes from underlying conflict and gains attention

<sup>22</sup> Freud, S.: Selected Papers, etc., pp. 197, 198.

<sup>&</sup>lt;sup>21</sup> Freud, S.: Selected Papers on Hysteria and Other Psychoneuroses, New York, 1909, pp. 3, 5, 8, and Collected Papers, London, 1924–25, pp. 149, 156.

and sympathy from others but very little of this conversion of conflict into symptoms is consciously directed. In contrast to the hysterical patient the malingerer<sup>23</sup> deliberately makes use of his symptoms for personal gain, sometimes to escape from responsibility or an unpleasant situation or to add to the concern of others, but often to support a claim for personal damages. Pure simulation of illness is rare and malingering of any degree would not be undertaken by a well adjusted person.

In psychoanalytic literature the obsessive thoughts and compulsive acts included by Janet under the heading of psychasthenia are manifestations of what the Freudians call compulsion neurosis. Both hysteria and compulsion neurosis are also referred to as transference neuroses. The symptoms of a compulsion neurosis may be considered as a morbid expression of the tendency to rhythm observed in all animal life. There is the same urge for repetition as is characteristic of all religious ceremonies but the ritual of the compulsive neurotic is a form of atonement for personal indulgence of forbidden desires or hostile impulses and it cannot be shared by others.

The phenomena of a compulsion neurosis suggest a regression to an animistic magical type of pre-logical thinking. The patient behaves as though he could exert a magical influence by his thoughts and acts, although he recognizes their absurdity or futility. He is usually involved in a conflict of masculinity versus femininity, of love versus hate,<sup>24</sup> of conscience versus carnal desires. His ambivalence tempts him to the point of indulgence and then drives him to compensate with protests of virility, of love and of virtue. His anxiety and chronic feeling of uncertainty are offset by great precision regarding details which often makes it impossible for him to arrive at a conclusion. Such motivations determine the activities of the scientist who spends so much of his time and energy in making his preliminary observations complete that he never reaches his main problem.

In more recent psychoanalytic literature it has been shown that psychoneurotic disorders are in large part due to a combination of unconscious sexual desires and hostile impulses directed toward various members of the family. This is particularly true of those de-

<sup>&</sup>lt;sup>23</sup> Menninger, K. S.: Psychology of a certain type of malingering, Arch. Neurol. and Psychiat., 33: 507.

Reed, J. V.: Psychology of trauma, Industrial Medicine, Sept. 1933.

<sup>&</sup>lt;sup>24</sup> Fenichel, O.: Outline of clinical psychoanalysis, Psychoanalytic Quart., 1:545, 582.

sires and impulses directed toward the parents, characteristic of the Oedipus complex. The symptoms have been found to afford not only gratification of repressed desires but also a means of atonement for these indulgences. Just as the naughty child anticipates and receives punishment from a parent and is thus relieved of a sense of guilt on being chastised, so the ego is punished by the super-ego for allowing itself to be seduced by the id. The ego having paid the penalty of suffering then feels at liberty to indulge again in forbidden pleasures. Through this constant interplay of forces within the personality the individual continues with his psychoneurotic adaptation to reality.

### CHAPTER VIII

### TOXIC PSYCHOSES

## (Dysergastic Reaction Types)

Definition. Toxic psychoses are those due essentially to toxic or poisonous substances formed within the body or introduced into the body from without. Toxic substances formed within the body are called endogenous toxins and those introduced from without are called exogenous toxins. In some conditions the toxins are both endogenous and exogenous.

Frequency. Owing to the fact that a large proportion of these psychoses are of short duration most of the patients are treated in general hospitals or at home. On this account an estimate of the frequency of these illnesses is difficult. Statistical studies indicate that they constitute at least 10 per cent of all psychoses. All ages and with the exception of alcoholic psychoses both sexes are affected equally. Delirious reactions are more frequent in early childhood and in old age.

Causes. Some of the most common endogenous toxins are those associated with infection, exhaustion or some physical disease. The most common exogenous toxic substances are alcohol, habit forming drugs, poisonous metals and certain gases. Individual susceptibility to particular toxic substances and latent tendencies¹ to psychoses are important factors in causing these psychoses. Some individuals develop psychoses from the effects of small amounts of a toxic substance which would not affect the average person. Some persons are so unstable that they develop psychoses from the effects of small amounts of any kind of toxic substance. In other words, the amount of toxic substance which can be tolerated without the development of a psychosis may be an index of personality stability.

Symptoms. Disturbances of consciousness varying from mild confusion to delirium are the symptoms most frequently associated

<sup>&</sup>lt;sup>1</sup> Jameison, G. R. and Wall, J. H.: Toxic states as complications in functional psychoses, Psychiat. Quart., 4:263.

with these illnesses. Other common symptoms are restlessness, irritability, apprehension and suspiciousness. There is also a great variety of psychotic symptoms, such as excitement, depression, hallucinations, delusions and bizarre symptoms which in the absence of toxic agents would suggest deteriorating psychoses. There are practically always some accompanying physical symptoms. These vary from feelings of weakness or fatigue to a condition of exhaustion or collapse. Convulsions are not uncommon in the more severe toxic states.

Course and prognosis. In general these psychoses have a rather abrupt onset and brief course. Some may not last more than a few hours while others may last for months or indefinitely, according to the potency of the toxic substance, the susceptibility of the patient and the severity and duration of the underlying disease. In some of these psychoses symptoms appear only at night. Many toxic psychoses therefore have a favorable prognosis while others merely initiate psychoses of long duration.

### CLINICAL TYPES OF TOXIC PSYCHOSES

Toxic psychoses may be divided into those due to endogenous toxins and those due to exogenous toxins. Many clinical varieties of each are recognized. They will be described in detail according to their frequency and importance.

#### ENDOGENOUS TOXIC PSYCHOSES

Any infectious disease may at times be complicated by a toxic psychosis. An infectious disease in which there is prolonged high fever or marked physical exhaustion is most likely to be complicated by a toxic psychosis. The symptoms may appear at the beginning of the febrile stage, during the height of the fever or after the fever has subsided and while the patient is still in a condition of physical exhaustion or collapse. These psychoses may also appear during the convalescence from infectious diseases or even after an apparent recovery has been reached.

Endogenous toxic psychoses may also be associated with a number of conditions such as hemorrhage, starvation, excessive physical and mental exertion, chronic wasting diseases and lack of recreation, rest or sleep. In many cases both exhaustion and infectious disease are factors in producing these psychoses and it is sometimes difficult to estimate which is the more important factor.

The acute psychoses or deliria associated with acute infections may be described as having three clinical stages. Among the first indications are headache, sensitiveness to light and noise, irritability, restlessness and a feeling of an uncontrollable rush of thoughts and pressure of speech. The memories of past events may become plastic visions while the recent memories become hazy. Sleep is disturbed by vivid dreams which cause the patient to wake with a start.

In the second phase of the delirious condition the patient may have sensations of being rocked on waves, of flying through the air or of falling. Vivid, unpleasant dream-like experiences begin as soon as the eyes are closed. These may frighten the patient and cause him to remain awake in order to avoid a repetition. As the delirium becomes more pronounced the patient begins to be troubled also while awake. Uncertainty of his surroundings passes into a state of complete disorientation with sensory misinterpretations in the form of illusions and hallucinations. These experiences may cause him to mutter, talk, laugh or cry out, and restlessness reaches its maximum degree.

In the more profound intoxications the third stage of the delirious state is observed. The hallucinations become less vivid and restlessness gradually decreases. If the patient's physical condition improves the manifestations of delirium may be observed again in the reverse order but in fatal cases there may be a rapid succession of stupor, coma and death.<sup>2</sup> A delirium is little more than a group of symptoms which indicate that the underlying condition is worse. The content of a delirium is determined more by the personality conflicts than by the agents exciting it.

Excerpts from illustrative cases. The following describes a case of toxic psychosis occurring in a young man twenty-three years old who had never before been ill. This psychosis represents a complication which occasionally arises in connection with acute physical disease. In this case it was associated with the infection and toxins of acute catarrhal jaundice.

<sup>&</sup>lt;sup>2</sup> Bonhoeffer, K.: Die Psychosen im Gefolge von akuten Infectionen, Handbuch der Psychiatrie, von Aschaffenburg, Leipzig, 1912.

Wolff, H. G. and Curran, D.: Nature of delirium and allied states, Arch. Neurol. and Psychiat., 33: 1175.

Ziegler, L. H.: A study of delirium, Amer. Jour. Psychiat., 6:105.

His illness began with general malaise, headache and soreness in the muscles. He was unable to work and spent most of the time in bed. Four days later nausea, vomiting, fever and marked jaundice had developed. After about two weeks he was apparently convalescing satisfactorily and it was four weeks after the onset of the illness that psychotic manifestations appeared. Then one day he began to talk in an hilarious manner and at four o'clock the following morning suddenly became excited, saw snakes and bears about him and seemed afraid. After that he talked disconnectedly about being "mixed up" and about killing himself and other people. At times there were marked fear and excitement. A week later he was admitted to a psychiatric hospital in this condition. A sample of his talk on admission shows peculiar disconnected ideas and a mild paranoid trend. "These different schemes they are working on meworrying me to death—you have got all my ideas and it's a shame too -vou got the last people in the world to help you—the Pope and the kings and the birds and snakes—you're dragging down the people instead of raising them up-my bed screeches-my life just goes as far as my father—he was white—he was in Heaven but that doesn't do the Chinese any good now-different people got the signs by putting electricity into operation." At times he was fairly well in touch with his surroundings, while at other times he was completely disoriented. He gradually became more quiet, clear in his thinking and appreciative of the fact that he had been sick. In the meantime there had been a marked improvement in his physical condition. Psychotic symptoms were observed for a total period of three weeks and he was discharged as recovered nine weeks after the onset of his illness.

A second case of toxic psychosis in an army officer, thirty-seven years old, was caused largely by physical exhaustion. He had seen active service for over three years during the World War, had worked for long hours, often with improper or insufficient food and had had practically no recreation or opportunity to rest. He had lost a great deal of weight and strength. He finally became confused and was placed under observation. On admission to the hospital he was very poorly nourished and thirty-five pounds under his usual weight. His tongue was coated, red, fissured and slightly swollen. He appeared older than his age and was described as a "hatchet-faced, holloweyed, weary looking man." There was coarse irregular tremor of

the fingers and of the tongue and lips in speaking. His gait was so unsteady that he seemed to be intoxicated. In some respects his condition suggested general paresis. Laboratory tests and the subsequent course however proved that this was not the case. There was a varying amount of confusion which was noticeable chiefly at night. In going to a toilet a few doors away from his room he lost his way. He groped about his room looking under the wardrobe and bed for something about which he felt vaguely uncertain. One time he said he was looking for a cigarette. His memory of the events of the preceding two months was hazy. This condition continued for a few weeks after which he improved rapidly.

A third case of toxic psychosis in a man thirty-five years old was due to infection and exhaustion. After some months of convalescence there was a marked change in his symptoms due to the development of a post-infectious psychosis. For two or three years this patient had been complaining of "stomach trouble" for which he had had repeated surgical operations. For six months after the last operation (repair of hernia through site of incision of former operation) he had severe attacks of diarrhea which were found to be due to amoebic dysentery. These attacks caused him to lose seventyfive pounds in weight. He became so emaciated and exhausted that death was expected. After being sleepless for over a week he developed an acute toxic psychosis characterized by delirium and an extreme excitement in which he "prayed at the top of his voice, repeated verses and made speeches." This condition lasted over a month after which time he gradually improved. In the meantime the diarrhea had stopped. He improved sufficiently to be able to take a sea voyage. He did not recover his former health however and it was noticed a few months after this acute toxic psychosis that he lacked interest, had little to say and was apparently depressed. In the course of several months he arrived at a condition in which he was remorseful, prayed a good deal, begged his friends for forgiveness and tried to mutilate himself. On this account he was admitted to a psychiatric hospital, six months after the first psychosis. For some weeks he had to be watched carefully and at times kept in restraint on account of desperate suicidal attempts. Voices accused him of "terrible perverse sexual acts," said that he was to be killed and told him to make a sacrifice of himself. His recovery was gradual and accompanied the improvement in his physical condition. For a

month or two before leaving the hospital he gradually assumed charge of his business and at the time of his discharge, a little more than a year after the first mental symptoms had appeared, he had entirely recovered.

Toxic psychoses associated with childbirth, especially the puerperium, are not uncommon. Most of them are delirious in nature and disappear with improvement in the underlying physical condition. Under different names these psychoses have been described since the time of Hippocrates and the impression that they are peculiar to childbirth survives in the term puerperal psychoses. As a matter of fact childbirth is merely an extra stress which sometimes acts as a factor in precipitating a psychosis. Including the delirious reactions to infection there is no clinical entity peculiar to childbirth.<sup>3</sup>

A large perportion of the cases of vomiting during pregnancy have important psychogenic factors and are examples of conversion hysteria. One patient had already had four abortions performed because of what appeared to be pernicious vomiting of pregnancy. She came to the hospital in her fifth pregnancy with the expectation that it would be terminated for the same reason. Psychiatric investigation showed that she was married to a divorced man who was primarily interested in physical relations. She was never attracted to him physically and when she learned that he continued to live with his first wife she developed a marked aversion to him. The thought of having a child by him made her feel nauseated and was the cause of her vomiting. "I've been very unhappy about it. Having a child and settling down used to frighten me to death. There were terrific scenes, always about sex. Sexual relations were painful and repulsive. I was forced to become pregnant. He never used precautions. We were just not suited to each other. It's too bad I'm in this condition."

As a rule the psychoses associated with childbirth are temporary reactions but as yet obstetricians have not been sufficiently concerned with the psychiatric aspects of their cases. One young woman in

<sup>&</sup>lt;sup>3</sup> Kilpatrick, E. and Tiebout, H. M.: A study of psychoses occurring in relation to childbirth, Amer. Jour. Psychiat., 6:145.

McGoogan, L. S.: The toxic psychoses of pregnancy and the puerperium, Amer. Jour. Obstetrics and Gynecology, 25:792.

Frumkes, G.: Mental disorders related to childbirth, Jour. Nerv. and Ment. Dis., 79: 540.

her second depression already had two children and neither she nor her husband wanted any more. He was unemployed most of the time and was unable to support his family. Her mother, two brothers and two sisters were in state hospitals with chronic mental illness. The remainder of her siblings died young of tuberculosis. Her father was alcoholic, a malingerer and a street beggar. For more than twenty years the family had been under the care of charitable agencies. The husband would not permit the patient to use contraceptive measures and the obstetrical hospital refused to perform either an abortion or a sterilization operation recommended by a psychiatrist.

It is true that mental illness in the family is not sufficient indication for abortion or sterilization. Practically no family is free of such illness and some of our most successful and useful citizens have had a parent or other close relative who was mentally disordered, so that the course of action to be followed must be decided in each case on its own merits. Marriage and having children seldom have therapeutic value for a person who is already unstable. Sometimes marriage and reproduction are undertaken as a test and a demonstration of heterosexual capacities by a person struggling with a conflict due to fundamental narcissistic or homosexual tendencies. The final result of such an undertaking may be suicide, murder or a malignant psychosis.<sup>4</sup>

Whatever the primary interests of a physician may be it is necessary that he have a thorough understanding of the various types of personality disorder. All types of this disorder are encountered in medical and surgical practice.<sup>5</sup> Not uncommonly the manifestations of a mental illness, especially a toxic psychosis, offer the only clue to the underlying physical condition. In such cases the presence of a psychosis is clear evidence that the physical disease is progressing. When a diabetic patient became delirious the incision and drainage of an abscess was imperative rather than any particular form of psychotherapy. Another patient had been delirious for about two months.

<sup>&</sup>lt;sup>4</sup> Zilboorg, G.: Malignant psychoses related to childbirth, Amer. Jour. Obstetrics and Gynecology, 15: 145.

Zilboorg, G.: The dynamics of schizophrenic reactions related to pregnancy and childbirth, Amer. Jour. Psychiat., 7:733.

<sup>&</sup>lt;sup>6</sup> Henry, G. W.: Some modern aspects of psychiatry in general hospital practice, Amer. Jour. Psychiat., 9: 481. See also "The Relation of Physical Disease to Personality Disorder" in the author's Essentials of Psychopathology.

After being under observation in a general hospital for four weeks he was transferred to a psychiatric hospital as a case of alcoholic psychosis. The actual cause of his psychosis was then found to be an ischio-rectal abscess.<sup>6</sup> Recovery from the psychosis followed promptly after incision and drainage of this abscess. Not only is a knowledge of personality disorders essential in diagnosis and treatment but also to anticipate and prevent complications.<sup>7</sup>

If the patient becomes delirious efforts should be directed toward eradicating the cause of the delirium and in the meantime someone should remain with the patient to give reassurance and to help the patient keep in touch with reality. The use of sedative medication in such cases should be avoided if possible as it often intensifies the delirious reaction.

The relationship of chronic foci of infection to toxic psychoses is a problem in itself.8 Much has been written about infection as a cause of mental illness and extravagant claims have been made for the beneficial results of eradicating foci of infection. These claims are not corroborated by the clinical experience of other physicians. In addition the pathogenicity of the micro-organisms involved is often a matter of conjecture; the immunity to the specific infection which a patient may have established cannot readily be determined; the manifestations of infection, except in its acute phases, are usually indefinite or overshadowed by other phenomena; therapy is applied often to only the more accessible foci of infection. Nevertheless the indications for the removal of these foci are just as urgent in the presence of a psychosis as they are in cases of rheumatic heart disease. The discovery of foci of infection often requires the most searching physical examinations, together with x-ray, bacteriologic, serologic and blood chemistry studies. The decision as to the best course of action to be taken following this discovery requires good

<sup>&</sup>lt;sup>6</sup> Zilboorg, G.: A psychosis caused by a latent focus of infection, N. Y. State Jour. Med., 27:714.

<sup>&</sup>lt;sup>7</sup> Washburne, A. C. and Carns, M. L.: Postoperative psychosis. Suggestions for prevention and treatment, Jour. Nerv. and Ment. Dis., 82: 508.

Muncie, W.: Postoperative states of excitement, Arch. Neurol. and Psychiat., 32:681.

<sup>&</sup>lt;sup>8</sup> Henry, G. W. and Doyle, M. C. H.: Focal infection in teeth, Amer. Jour. Psychiat., 8: 915.

<sup>&</sup>lt;sup>9</sup> McIntyre, H. D.: Blood chemistry in toxic psychoses, Amer. Jour. Psychiat., 7:917.

judgment and experience in the general field of medicine as well as in psychiatry.

The problem of the relation of ductless gland function to personality disorder is one of the most perplexing. It would seem that glands which are intimately associated with the function of the vegetative nervous system and with structural and physiological development must exert an important influence on personality development and therefore in personality disorder. Conclusive evidence of this influence is lacking except in those cases in which there is gross defect or dysfunction of endocrine glands.<sup>10</sup>

Studies of the constitutional concomitants of the psychoses lend some plausibility to the theory that endocrine abnormalities are important factors in the genesis of psychoses. In one study<sup>11</sup> attention was paid to skeletal abnormalities and to anomalies of sex characteristics, of fat and hair distribution. The highest incidence of growth disturbance was found in schizophrenic patients (36 per cent) and the lowest in manic-depressive patients (2 per cent). This marked difference is in keeping with the clinical experience that the schizophrenic patient is more poorly integrated than the manic-depressive.

Growth disturbance alone is not sufficient evidence of the relationship of endocrine function to personality disorder. The desirability of conservatism in estimating this relationship is emphasized by a survey<sup>12</sup> of 6,000 state hospital patients which showed only eight cases of outright endocrinopathy. The results of this survey are supported by a quantitative necropsy study<sup>13</sup> of the endocrine glands of psychotic patients. In view of the frequent occurrence of endocrine dysfunction without personality disorder it is probable that the relationship is too subtle to be readily evaluated. Much is still to be learned from detailed psychiatric studies of personality adjustment to endocrine disorder and to disturbance in growth.

Psychotic symptoms or tendencies are occasionally observed in

<sup>&</sup>lt;sup>10</sup> Hoskins, R. G.: Endocrinology, Chap. XI in Problems of Mental Disorders by Bentley, M. and Cowdry, E. V., New York, 1934.

<sup>&</sup>lt;sup>11</sup> Wertham, F. I.: The incidence of growth disorders in 923 cases of mental disease, Arch. Neurol. and Psychiat., 21: 1128.

<sup>&</sup>lt;sup>12</sup> Notkin, J.: Clinical study of psychoses associated with various types of endocrinopathy, Amer. Jour. Psychiat., 12: 331.

<sup>&</sup>lt;sup>18</sup> Freeman, W.: Personality and the endocrines; a study based upon 1,400 quantitative necropsies, Annals Int. Med., 9:444.

connection with various ductless gland disorders. The most common manifestations will be given briefly.

Hyperthyroidism. Common symptoms, especially in exophthalmic patients, are apprehension, irritability, excitability, restlessness, unusual alertness and quickness of movements and in severe cases confusion, delirium or conditions somewhat similar to manic excitement.<sup>14</sup> My own studies suggest that long before these symptoms appear there have been psychogenic factors in operation. The patient who develops Graves' disease may have been constitutionally predisposed to live strenuously but it can be easily demonstrated that he does. He is inclined to select the more difficult course and as obstacles arise he meets them with greater determination to succeed. He depends solely upon his own resources and does not even confide in others. He becomes tense, anxious and perhaps desperate. The increasing demands which he makes upon his body are finally registered in an acceleration of metabolic processes beyond normal thyroid function. The usual manifestations of thyrotoxicosis then appear.

Hypothyroidism. In myxedema there is slowness of thought and action, indifference, apathy, forgetfulness and tendency to mental deterioration. Hallucinations sometimes occur. The usual tendency is toward psychoses resembling depressions, although mild excitements have occasionally been observed.<sup>15</sup> In cretinism, the mentality may be that of an idiot. Individual variations are dependent upon the severity of thyroid deficiency and upon the underlying personality characteristics of the patient.<sup>16</sup>

Dyspituitarism. In the so-called hyperpituitarism sleeplessness, difficulty in concentration, indecision, irritability, suspiciousness and some tendency to develop psychoneurotic symptoms have been observed. On the contrary in states of hypopituitarism drowsiness,

Benedek, T.: Mental processes in thyrotoxic states, Psychoanalytic Quart., 3: 153.

<sup>&</sup>lt;sup>14</sup> Katzenelbogen, S. and Luton, F. H.: Hyperthyroidism and psychobiological reactions, Amer. Jour. Psychiat., 91: 969.

Jameison, G. R. and Wall, J. H.: Psychoses associated with hyperthyroidism, Psychiat. Quart., 10:464.

<sup>&</sup>lt;sup>15</sup> Akelaitis, A. J. E.: Psychiatric aspects of myxedema, Jour. Nerv. and Ment. Dis., 83:22.

<sup>&</sup>lt;sup>16</sup> Bronstein, I. P. and Brown, A. W.: Hyperthyroidism and cretinism in childhood, Amer. Jour. Orthopsychiat., 4:413.

difficulty in concentration, forgetfullness, loss of consciousness with convulsive seizures, mental deterioration and a variety of psychotic symptoms have been described. It is probable that in some cases the symptoms described were due to pituitary tumor. Inasmuch as the parts of the pituitary body have quite different functions, it is very difficult to ascribe symptoms to increased or decreased function of the whole gland. When the relation of pituitary hormones to thyroid and gonadal functions is fully understood the personality reactions will probably also be much clearer.<sup>17</sup>

Gonadal syndromes. While no definite psychotic symptoms can be ascribed to disorders of the sex glands, the onset of psychoses at puberty and during the menopause is commonly observed and it is very likely that changes in gonadal function at these times are important contributing factors in the development of personality disorder.

No special psychotic symptoms or tendencies have been observed in connection with other ductless gland disorders.<sup>18</sup>

Psychoses accompanying physical diseases. Any serious or protracted illness which greatly impairs the general health of the patient may be sufficient to precipitate mental illness especially if he is unstable. This complication may result from the action of toxins and from exhaustion as well as from apprehension regarding the outcome of the illness. More often this complication is an acute toxic psychosis but a physical illness may also be a factor in the causation of a prolonged mental illness. Gastrointestinal stasis has been considered a cause of psychoses. There is little evidence for this except the fact that psychoses are frequently accompanied by gastrointestinal motor disturbances and that the more acute the psychotic manifestations are, the greater are the disturbances of the digestive tract.<sup>19</sup>

Such conditions or diseases as uremia, eclampsia and diabetes are responsible for acute mental disturbances. Addison's disease, influenza and heart disease have been considered as causes of psychoses and many infectious and chronic wasting diseases lead to the

<sup>&</sup>lt;sup>17</sup> Psychotic disorder associated with acromegaly is described in the author's Essentials of Psychopathology, p. 86.

<sup>&</sup>lt;sup>18</sup> Menninger, W. C.: The inter-relationships of mental disorders and diabetes mellitus, Jour. Ment. Sci., 81: 332.

<sup>&</sup>lt;sup>19</sup> Henry, G. W.: Gastrointestinal motor functions in schizophrenia, Amer. Jour. Psychiat., 7: 135.

infectious-exhaustive psychoses already considered. Most of the acute psychotic reactions to disease or injury of the brain are toxic in nature and dependent upon local metabolic disturbances associated with the lesion.

### EXOGENOUS TOXIC PSYCHOSES

As has been stated, these toxic psychoses are due to toxic or poisonous substances which are introduced into the body from without. Some of the most common will be described. The psychoses vary according to the length of time during which the individual has been exposed to its effects and to the underlying personality instability.

Alcoholic psychoses. About 10 per cent of all psychoses are associated with alcoholic excesses.<sup>20</sup> This high percentage is due to the relative frequency with which alcohol has been used and not so much to its specific action in causing psychoses. Its excessive use suggests morbid sensual desires or abnormal cravings. Many still believe that alcohol taken internally is a stimulant. Its apparent stimulating effects are really the manifestations of intoxication, of paresis of cortical functions,<sup>21</sup> and of a loss of sensitiveness to the normal feelings of fatigue. Those personality characteristics referred to as self control, poise and discretion are inhibited with the result that the emotional and instinctive tendencies of the individual become more manifest. Alcoholic intoxication may afford an escape from painful feelings of depression or it may be a part of a state of exhilaration. Sprees may therefore be prominent manifestations of recurrent mood disorders. Alcohol may lend charm to the ruminations of the individual who prefers solitude or it may facilitate a kind of sociability in which levity replaces a consideration of the more serious aspects of life. It lends assurance to those who are otherwise physically or sexually insecure and it deadens the conscience of those who when sober might hesitate to commit asocial acts or to indulge in perverse sexual practices. It may be a form of protest against parental or other social restrictions especially for those who have not vet realized the emancipation of the mature adult. In any case alcoholic intoxication facilitates a regression to a juvenile form of human adaptation

<sup>&</sup>lt;sup>20</sup> Garvin, W. C.: Post prohibition alcoholic psychoses in New York State, Amer. Jour. Psychiat., 9: 739.

<sup>&</sup>lt;sup>21</sup> Gantt, W. H.: Effect of alcohol on cortical and subcortical activity measured by the conditioned reflex method, Bull. Johns Hopkins Hosp., 56:61.

in which the tendency to be occupied with abstract logical thought is replaced by an entertaining and superficial intellectual brilliancy; the regard for the conventional social relationships yields to a desire for frank expression of feeling. Psychoanalytic investigation tends to show that alcoholism and homosexuality are closely related.

A number of psychotic states are associated with alcoholic excesses and the most common of these will be described in some detail.

Drunkenness. During the early stages of intoxication there may be excitement with acts of violence or depression with suicidal tendencies. During profound intoxication there is loss of memory for recent events and in cases of extreme intoxication a condition of stupor or coma is reached.<sup>22</sup> When death occurs it is usually due to a combination of exposure, neglect and profound intoxication.

A condition of drunkenness sometimes exposes the individual to companions who take advantage of the intoxicated state by instigating quarrels, by causing or allowing the performance of immoral acts or by committing robbery. The intoxicated person may sign a business contract or even be drawn into an unsuitable marriage and later have little or no recollection of what has happened. Residual symptoms in the form of gastric disturbances are common sequelae of habitual drunkenness.

Some persons manifest a tendency toward periodic intoxication. There is no definite craving for alcohol until after one or two drinks have been taken and then the individual loses all control and drinks to the limit of his capacity. Others have recurrent cravings in which there is an urgent and uncontrollable desire to drink (dipsomania). Periodic drinkers often make all sorts of promises to abstain from drinking but in the presence of the usual drinking environment all such promises are forgotten or disregarded.

Some persons of this type readily establish a tolerance for alcohol and large amounts must be taken to satisfy their cravings or to insure personal comfort. They are therefore continuously intoxicated or are said to be suffering from *chronic inebriety*. This condition is usually progressive and may result in a kind of mental deterioration in which forgetfulness, indifference and increasing difficulties in concentration greatly impair efficiency. Through attempts to conceal discrepancies deception is practised and eventually self respect and

<sup>&</sup>lt;sup>22</sup> Fleming, R.: A psychiatric concept of acute alcoholic intoxication, Amer. Jour. Psychiat., 92:89.

even desire for the respect of others are lost. The accompanying physical deterioration leaves the individual incapacitated and dependent.<sup>23</sup>

Delirium tremens. This acute toxic psychosis is usually occasioned by the indulgence of heavy drinkers in a prolonged drunken debauch with insufficient food and rest. It sometimes occurs after alcohol has been suddenly withdrawn because of a serious injury or with the development of an acute infectious disease, such as pneumonia. In such cases the shock of the accident or the additional toxins of the infectious disease are factors in precipitating the psychosis.

Some of the first symptoms are restlessness, tremulousness and sleeplessness. The symptoms are more obvious at night and often develop rapidly. When they are most marked there is a decided tremor of the muscles of the face, tongue, hands and sometimes of other muscle groups and there is usually a very disturbing delirium with disorientation and vivid visual hallucinations. Some patients are terrified by seeing all sorts of horrible, loathsome creatures about them, such as snakes, rats and bugs. They may also see hideous, grimacing faces. These hallucinations are sometimes made more terrible by auditory hallucinations in the form of screaming and shricking. During the acute stages patients are constantly trying to combat or flee from these terrible creatures. While in this wildly excited state they may try to jump out of the window or they may injure those about them in their frenzy to escape from their horrifying experiences. Some patients remain fairly calm and appear to be mildly entertained by their experiences. Others who are more seriously ill present nothing more than a low, muttering delirium. Acute symptoms as a rule last about three days and are terminated by a long sleep. With this delirious state there may be fever, tachycardia, anorexia, sweating and albuminuria. About 10 per cent of these patients die, most commonly from exhaustion, cardiac failure or pneumonia.

<sup>23</sup> Ziegler, L. H. and Horner, H. C.: A clinical and pathologic study of alcoholism, N. Y. State Jour. Med., 35: 921.

Bender, L. and Schilder, P.: Encephalopathia alcoholica, Arch. Neurol. and Psychiat., 29: 990.

Wall, J. H.: A study of alcoholism in men, Amer. Jour. Psychiat., 92: 1389. Wall, J. H.: A study of alcoholism in women, Amer. Jour. Psychiat., 93: 943. Diethelm, O.: The treatment of chronic alcoholism, Southern Med. Jour., 27: 347.

Typical manifestations of delirium tremens were observed in the case of a forty year old business executive who had been drinking to excess for thirteen years. On admission he was anemic and undernourished and showed marked tremor of his tongue, lips and hands. He was unsteady and uncertain in his bodily movements and in his speech. He talked of scenery moving by on the ceiling, snakes crawling around and of a wolf biting at his chin. "I can't sleep—there are two snakes crawling around on my pajama coat. I gave it to one of them (slapping bedclothes). My, what a lot of flies in this room! (none present). Guess I'll wear these trousers (bed sheet). Here, Joe, leave those papers alone. I'll take this voucher along with me (takes hold of blanket)." He picks at pajamas and says, "Oh, there I've got you, you rascal." He also picked an octopus off the floor and alligators out of his vest pocket.

During the first four days his condition remained stationary. He saw brown cats, red canaries, bugs, dogs and goats in his room. At various times he said he was in a hotel, a club, a friend's home, and aboard a ship. He carried on conversations with people not present. He talked as though his wife were in bed with him and he was apprehensive that she might be harmed. At times he appeared apathetic. He wet himself and made a diaper for himself out of a newspaper. Recent memory, retention and immediate recall were poor. He gave a rambling, inaccurate account of what he had been doing in the past month. Remote memory seemed unimpaired. Calculation was inaccurate and he showed no insight regarding his mistakes. He said he was a little nervous but would soon be perfectly all right.

This patient's father drank to excess but had periods of several months during which he was a total abstainer. His only uncle gradually developed hallucinations and delusions of persecution after several years of heavy drinking and spent the last eleven years of his life in a state hospital.

The patient was dominated and protected by his mother who objected to his marriage. He preferred the company of men and was somewhat promiscuous in his relations with women. His first marriage ended in divorce and he began to drink to excess when his second wife talked of getting a divorce. They quarreled because he did not want her to have children.

During the first few weeks of hospital treatment the patient's condition improved rapidly. The hallucinations disappeared but he

continued to be troubled with visual distortions for three months. Objects seemed to be either too large or too small. He became apprehensive that his own voice was peculiar or that he was not acting normally. After five months he was discharged much improved with a diagnosis of delirium tremens. He continued to improve and returned to his work. A year later he reported that he was living amicably with his wife and that they had a healthy child. He had solved most of his difficulties by total abstinence and he had found that it was not necessary to drink in order to be successful in business.

Acute alcoholic hallucinosis. This psychosis develops from conditions similar to those giving rise to delirium tremens. The symptoms<sup>24</sup> differ in that the patient is not so physically ill and the hallucinations are chiefly auditory. The illness lasts from a few weeks to several months and it may become chronic.<sup>25</sup> The hallucinations are almost always very unpleasant. Threats, commands. insinuations and definite accusations of immorality and perverse sexual practices are commonly hallucinated. These hallucinations are usually identified with people nearby and lend support to suspicions which often develop into a system of persecutory delusions. The patient may believe that his neighbors and friends are calling him vile names and making all sorts of unpleasant remarks about him. On this account he is very likely to be dangerous to others and even homicidal. On the other hand he may become despondent and suicidal because of continual tormenting voices, some of which tell him that he will never get well and that he should commit suicide. Such patients should be considered dangerous to themselves or others. Relapses are common, especially if drinking is resumed. Hospital treatment is practically obligatory.

This type of alcoholic psychosis is illustrated in the case of a man thirty-six years old who for at least fifteen years had been frequently going on sprees. When he started on a spree he would gulp down straight whiskey until he was intoxicated. His drinking companions were of a worthless type and he avoided his family while intoxicated.

<sup>&</sup>lt;sup>24</sup> Schneider, C. A.: Studies in alcoholic hallucinoses, Psychiatric Bull., 1:3.

<sup>&</sup>lt;sup>25</sup> Kirby, G. H.: Alcoholic hallucinoses with special reference to prognoses and relation to other psychoses, Psychiatric Bull., 1:353.

His father, a maternal uncle and his only brother drank to excess. During his childhood he lived with various relatives because his father was improvident. At twenty-two he left college to enter his deceased uncle's business but within two years he was discharged and the business had failed. Since then he has been unemployed and living on an income from his aunt.

It appears that a number of factors contributed to the patient's drinking. His only attachment was to a suspicious, eccentric sister, who seemed to take the place of his mother. While intoxicated he was promiscuous in his sexual activities. This resulted in two attacks of gonorrhea prior to a marriage at the age of twenty-nine to a prostitute. She deliberately married him while he was intoxicated. They secretly lived together for ten days and she has since kept him financially embarrassed paying her alimony.

The realization of his marriage was a bitter experience which caused him to drink to greater excess. His tolerance for alcohol decreased and he became irritable and ugly while drinking. Two years ago his mother died and soon afterward he made an alliance with a young woman whose interests were entirely commercial. He would be sober for several days and then go on a spree lasting two weeks. The family physician reports that the patient has been sober for not more than a total of six months in the past seven years. Frequently he spent two weeks in a special hospital for alcoholics getting sobered up.

As far as could be determined the patient showed only one previous psychotic reaction to his drinking. This occurred four years ago when for a short period he was delirious and saw snakes. His present psychotic state began two weeks before admission following a spree. He was eating poorly and complained of nausea and headache. A week later he protested that he was being given dope by the nurse taking care of him. He heard her say, "I'll not only break him but I'll break his sister." He became agitated, fearful and whispered that federal agents were coming for him because they believed he was a member of a notorious gang then on trial for compulsory prostitution.

On admission he was confused and untidy. He lay in bed, staring at the wall, occasionally mumbling to himself. At times he screamed, ran about the room and tried to strike his head against the wall. He heard bells, airplanes and shots. Voices repeatedly told him that he was dead. His trend of thought is shown by his responses to hallucinations: "How could I be charged with murder when I'm already dead? I'm so g. d. full of dope I am screwed up high in the air. What are you going to do about the stiff? That ought to be cared for right away. When I was kidnapped by you guys... I was supposed to be at the hospital. Now I can't get away." He thought the physician and the nurses were gangsters but he was approximately oriented as to place and time. Physical and laboratory examinations were negative.

During the first ten days he had frequent episodes of terror on hearing loud noises. Marked tremors of the extremities and of the facial muscles developed, his pulse and respiration became rapid and he perspired freely. These attacks did not last more than a few minutes. He feared he would be castrated and he sometimes exposed his genitals, saying, "You can go to work now." There were also crying spells and outbursts of anger. On one occasion he violently assaulted a male nurse.

The content of his thoughts and hallucinations remained unchanged. "I get threats of going for a ride, tearing my tongue out or chopping my ears off. It's just a diabolical scheme. There is nothing wrong with me at all. They are tantalizing hell out of me. When my sister comes in everything is all right but the minute she is gone the din starts all over again. They are out to ruin me and my sister. I've got damned little time to live the way my heart is."

A month after admission he reluctantly admitted that his "nerves cracked and went to pieces. I know my sister put me in here to try and get me better. I think I've learned my lesson and can leave booze alone." He was persuaded to remain in the hospital a few weeks longer but at the end of two months he left against advice, apparently no longer hallucinating but still suspicious of the nurses and believing that the voices were real.

Chronic delusional alcoholic psychoses. Chronic paranoid psychoses with mental deterioration not uncommonly follow chronic inebriety and acute hallucinatory psychoses. In these psychoses unpleasant hallucinations and delusions may persist for years although they gradually lose their vividness and realism. Some chronic alcoholics do not reach this condition until middle life when delusions of marital infidelity may be elaborated. These are usually related to failing sexual vigor or may have basis in the loss of interest in a dissipated

husband who has become impotent. Trivial incidents may be considered by the patient as definite evidence that his wife's affections have drifted elsewhere. On account of the hallucinations, delusions and mental deterioration such patients require permanent hospital care.

Korsakow's psychosis. While this psychosis is sometimes caused by other toxic substances such as lead, arsenic and ergotine it is usually a result of alcoholic excesses. In the early stages the symptoms are often similar to those of delirium tremens except that they are more prolonged. Characteristic symptoms appear somewhat later in the form of multiple neuritis, disorientation and a peculiar memory defect, particularly for events subsequent to the onset of symptoms. In place of events actually forgotten inconsistent narrations are readily told without a realization of the memory defect or of the inconsistencies. In spite of this there is usually no evidence of confusion. A patient in narrating the events of the past half hour said in the course of five minutes' conversation (1) that he had been at home all the time, (2) that he had been out walking with his sister and (3) that he had just come from his office. As a matter of fact he had been in the hospital for several weeks. He was oblivious not only of this fact, but also of the different accounts he had given. He gave a different account each time he was asked and sometimes elaborated his fabricated experiences in great detail.

Such fabrications may be pure inventions which at times are based on hallucinations or they may be distorted recollections of actual events which have been wrongly oriented as to time and place.<sup>26</sup> Psychological investigation has shown that the memory defect is confined chiefly to new associations and that the recollection of old and repeated associations is rather good.<sup>27</sup>

The acute delirious symptoms disappear in the course of a few weeks or months but there is almost always a permanent memory defect and some mental deterioration. Acute fabrications tend to disappear with the passage of time but they may be revived by suggestion. With the subsidence of acute symptoms and the realization of a persistent memory defect the patient either attempts to conceal

<sup>&</sup>lt;sup>26</sup> Moll, J. M.: The "Amnestic" or "Korsakow's" syndrome, with alcoholic etiology, J. Ment. Sci., 61: 424.

<sup>&</sup>lt;sup>27</sup> Wechsler, D.: A study of retention in Korsakoff psychosis, Psychiatric Bull., 2: 403.

his poor memory or shows a childish pride in having at last remembered a certain name or date. Death may occur during the acute stages, particularly if the neuritis is very extensive.

A typical Korsakow psychosis was observed in a forty year old executive who had been drinking to excess for about seven years. He was always secretive about his drinking and after life became difficult he gradually increased the amount until he was drinking a quart of whiskey per day.

His family objected to drinking possibly because a maternal uncle had been a heavy drinker. With only a grammar school education he was probably insecure when he had been advanced to a position where he was in charge of 11,000 men. He says he worried a good deal about his responsibilities. He remained devoted to his wife although she was very critical of him. "After a while I buoyed myself up with alcohol but it didn't help in the long run."

Although he tried to conceal from his associates the fact that he was drinking his secretary noticed five years before admission that at times he was slightly intoxicated while at work. Two years ago he took a long vacation to recover from a "nervous and rundown" condition which was due to excessive drinking. He then returned to work in excellent condition but within a few months his wife became ill and died. Thereafter he ate poorly and drank more and more. His secretary finally had to do most of his work.

A month before admission his left eye began to turn inward, his vision failed until he could scarcely see, he lost control of his legs, became disoriented and collapsed. For several days after this he did not speak. He was completely disoriented most of the time. Occasionally he had some realization of his confused state and said that he was going crazy.

He was in this condition on admission. In addition it was noted that he did not seem much concerned about himself or his surroundings. The following excerpts from his mental examination characterize his condition. He greets the physician spontaneously with, "How do you do? Fine day, isn't it?" Do you know my name? "Oh sure, I know who you are. Are you the young man who tried to sell me some books the other day?" I am a doctor. "Oh yes, yes, sure, certainly, now I know you. You were in this morning to see me and we had a long talk." (not true) Do you know the name of this place? "Oh yes, sure. That's a trick one. I know it as

well as my own name. I will tell you in a second." Date? "O Lord, don't ask me that. Wait a minute. No, I can't tell you." Day? "Monday." (Thursday) Month? "Let me see—is it June?" (c) Time? "Afternoon." (9 A.M.) Where do you live? "New York." How long? "Let's see—thirteen years—no it isn't —it's sixteen years." Memory was found to be defective especially for the events of recent months. He fabricated freely. Precision tests were performed poorly.

Physical examination showed that he was poorly nourished, his sight was poor, his speech was slurred and stammering. There was a coarse tremor of both hands and both knee and ankle jerks were absent. Ophthalmoscopic examination revealed some evidence of optic atrophy, more marked in the left eye. Blood, urine and spinal fluid examinations were negative.

During the first few days in the hospital he slept poorly, wet the bed and sometimes voided on the floor. He called for people who were not present. One morning he feared there was going to be a fire and he thought a man was standing behind a chair in his room. He continued to be disoriented and he fabricated spontaneously: Do you know me? "Oh sure I know you. You are the young man who was selling some stuff here." What? "Oh, connected with merchandise." Where yesterday? "Got out of bed in Canada, up near Quebec. I took a train and came to New York. Then I went to the office and telephoned home." He also gave a detailed account of a dinner he had attended the day before but did not remember that his secretary had visited him.

Within a few weeks he was in good physical condition but there was little change in his memory. He was unable to remember the name of his physician or nurse and he volunteered an elaborate account of his daughter's wedding which had no basis in fact.

Seven months after admission his responses were as follows: Day? "Tuesday the 19th." (Wednesday the 23rd) When did you come here? "I was badly mixed up—I understand it was January a year ago." When were you out last? "Last Thanksgiving for a short ride on the Bronx River." (not true) What is the name of this place? "Oh, you spring these things so suddenly. You knocked it right out of my mind."

Shortly afterward he was permitted to visit at the home of a friend. For two days he didn't wash his face and he went about the

house in his pajamas. He said he was planning to get married again and that he did not intend to abstain from drinking. He expressed a fear of returning to the hospital and said he was afraid of the other patients. His friends yielded to his wishes and he was therefore officially discharged. Diagnosis: Alcoholic psychosis, Korsakow type. Condition: Improved. Prognosis: Poor.

#### DRUG ADDICTION

While a large proportion of the population can indulge themselves with alcoholic beverages without becoming inebriates the same is not true of habit-forming drugs. The chances of becoming addicted to the use of opium and some of its derivatives are so great that they cannot be safely employed except on the prescription of a physician and preferably without the knowledge of the patient.

From studies of the characteristics of drug addicts it appears that over fifty per cent of them were psychopathic before they became addicted but this does not alter the fact that no one can take a habit-forming drug with impunity. Some physicians and nurses are inclined to be over-confident of their self control and this error along with the ease of procuring drugs causes the percentage of addiction in these professions to be unusually high.

Psychopathic individuals are more susceptible because the drug supplies them with an easy means of adjusting some of their personality difficulties. They soon find however that this solution brings greater evils. The mild feeling of exhilaration, the pleasant dream-like states and the relaxation are experienced only in the beginning. When the habit has become established the drug must be taken to avoid the suffering of deprivation. Moreover, the chances of ever becoming permanently liberated from the craving for these drugs are very small.<sup>28</sup>

It appears that criminals are less often aggressive when under the influence of these drugs. They lack initiative and tend to become

<sup>28</sup> Kolb, L.: Drug addiction in its relation to crime; Types and characteristics of drug addicts; Pleasure and deterioration from narcotic addiction, Mental Hygiene, 9:74, 300, 699.

Kolb, L.: Clinical contribution to drug addiction, J. Nerv. and Ment. Dis., 66: 22.

Report of Committee on Drug Addiction, Amer. Jour. Psychiat., 10:433. Kolb, L. and DuMez, A. G.: Experimental addiction of animals to opiates, Reprint No. 1463, U. S. Public Health Service. pleasant, agreeable and unconcerned about their usual grievances. When the effects have worn off they return to their morose, irritable, restless and discontented state. If the need for another dose cannot be satisfied promptly they become desperate, their criminal impulses are accentuated and they may commit violent acts when thwarted in the search for more of the drug.

Opium, morphine and heroin psychoses. It is well known that the use of these drugs is attended with the risk of the formation of pernicious habits and cravings. Moral and emotional deterioration and gradual loss of physical health are conspicuous in those who have become victims to these drugs. After three weeks of their daily use addiction is likely to follow. Once the habit is contracted the unfortunate individual is seldom able to stop it voluntarily. After the immediate effects of a dose wear off another dose must be taken to avoid definite feelings of discomfort and distress. To obtain the desired effect the dose must be gradually increased. Addicts tolerate astonishingly large doses without symptoms of acute intoxication. Some take from fifteen to twenty times the lethal dose for a normal person.<sup>29</sup> Ideals, ambitions, sense of responsibility and moral stamina are gradually lost. The companionship of similar unfortunate, sometimes vicious and generally depraved human beings is sought. Secretiveness and deception, especially in regard to the drug habit, are characteristic. These people finally become irritable and excitable or morose and hypochondriacal and they may have occasional periods of wild excitement or suicidal depression. Confusion and delirium with hallucinations sometimes occur and more often when the drug is removed.

Withdrawal symptoms are so distressing that hospital treatment is required. The dosage is gradually reduced according to the condition of the patient. He experiences progressively increasing weakness, restlessness and anxiety. A feeling of impending disaster may be associated with spasmodic coughing, ceaseless yawning and sneezing. The secretion of tears and saliva is copious. There is a slight elevation of temperature and the body is cold and clammy. Increasing nausea is followed by vomiting and diarrhea, intestinal cramps, muscular twitchings, general tremors of the body and shooting pains in the bones and joints. Fall in blood pressure, and slowing of the

<sup>&</sup>lt;sup>29</sup> Wolff, H. G.: Changes in the interstitial cells of the brain with morphine intoxication, Arch. Neurol. and Psychiat., 21: 1387.

pulse may be accompanied by fainting spells and loss of consciousness. In the most severe reactions there may be general convulsive attacks and occasionally collapse and death.

The acute manifestations of withdrawal increase at first from hour to hour and may last for three or four days. During this time the patient suffers great distress and protests that he is in unbearable agony. Much of the suffering is unavoidable. Too rapid withdrawal should be avoided and if alarming symptoms develop the patient usually can be restored to a comfortable state within an hour after an ample administration of the drug.

Cocaine psychosis. This in many respects resembles morphine psychoses and, as cocaine is often taken with morphine, there may be a mixture of the symptoms of both. Especially characteristic are the definite feelings that something is crawling under the skin and later the visual and cutaneous hallucinations of worms and insects. In severe intoxications there may be also auditory hallucinations and a state of marked agitation and confusion resembling delirium tremens.

Moderate doses of cocaine tend to give a criminal more courage and confidence but if he exceeds his tolerance he becomes suspicious and fearful and runs away from imagined enemies. A policeman seems to peep out from behind every tree and while in this state of frenzy acts of violence may be committed if escape is cut off.

Hashish psychosis. The drug by which this psychosis is produced belongs to the botanical class of cannabis sativa. It is generally known as cannabis indica or Indian hemp. In recent years the use of marihuana, a crude form of the drug, has attracted a good deal of attention. The underworld refer to it by several names such as muggles, reefers, loco weed, and goof butts. The plant grows as a weed in Mexico and in the southwestern section of the United States. In other parts it is being cultivated for narcotic purposes.

Intoxication from smoking this drug is manifested by a period of anxiety which is followed in about twenty minutes by euphoria and peculiar dream-like states in which there may be illusions and hallucinations. The person may suddenly feel that he has stepped out of his body and that he is floating through space. He seems to be two persons, one sitting coldly and objectively observing the other through a haze of unreality. The external world seems to be a part of a dream. A short time seems infinitely long and the sense of the relative distance of various objects is greatly distorted.

Marihuana tends to produce morbid expressions of the personality affected.<sup>30</sup> While under its influence some persons are prone to acts of violence. This is especially true of natives in the Orient. In Malay hashish and amuck are synonymous terms and the phrase "running amuck" has its origin in the behavior displayed by natives under the influence of this drug. No real tolerance is developed and there are no withdrawal symptoms but continued use leads to a kind of mental deterioration similar to that produced by other habit-forming drugs.<sup>31</sup>

Bromide psychosis. Bromides are sometimes used to excess in the treatment of epilepsy and occasionally an unstable individual may attempt to solve his difficulties by means of bromide intoxication.<sup>32</sup> In the early stages of intoxication the person becomes drowsy, irritable, euphoric and has difficulty recalling recent events. This may be followed by a dream-like or delirious state in which there are visual and auditory hallucinations, the visual being more prominent. The illusions and hallucinations may be terrifying and cause the patient to move about restlessly seeking persecutors or attempting to escape from them. There may be alternating periods of excitement and stupor. In some cases a bromide delirium may continue for several weeks after the drug has been stopped.<sup>33</sup>

Bromide intoxications eventually lead to a mental deterioration characterized by slowness in thinking and action, dullness, memory disturbances, circumstantiality and perseveration. (By perseveration is meant a tendency to give the same response to different questions or stimuli because of difficulty in passing from one thought to another. This phenomenon is more often observed in organic psychoses.)

In addition to these mental symptoms there are usually an acneform eruption, foul breath, coated tongue, poor appetite and constipation and there may be sensory and motor disturbances including

<sup>&</sup>lt;sup>30</sup> Bromberg, W.: Marihuana intoxication, Amer. Jour. Psychiat., 91: 303. Drewry, P. H.: Some psychiatric aspects of marihuana intoxication, Psychiat. Quart., 10: 232.

<sup>&</sup>lt;sup>31</sup> Dhunjibhoy, J. E.: Indian hemp insanity, J. Ment. Sci., 76: 254.

<sup>&</sup>lt;sup>32</sup> Katzenelbogen, S. et al.: Bromide intoxication. Its relation to the content of bromide in blood and barrier permeability to bromide, Amer. Jour. Psychiat., 13:637.

<sup>&</sup>lt;sup>33</sup> Levin, M.: Bromide delirium and other bromide psychoses, Amer. Jour. Psychiat., 12: 1125.

diminished sensibility to touch and pain, diminished or absent deep reflexes, tremors and ataxia.<sup>34</sup>

#### OTHER TOXIC PSYCHOSES

Lead poisoning has caused psychoses somewhat resembling alcoholic psychoses. Chloral used over long periods may produce hallucinations and some deterioration. Severe poisoning with illuminating gas may cause emotional instability, memory defects, mental deterioration or psychoses resembling the early stages of general paresis. Many other substances, such as acetanilid, phenacetin, sulphonal, trional, veronal, belladonna and hyoscyamus in large quantities produce delirium with confusion, hallucinations and memory difficulties. Practically any form of sedative medication when used over a long period of time may cause a susceptible individual to become dependent upon its continued use.<sup>35</sup>

Carbon monoxide poisoning. The most common reaction to gas poisoning is that following exposure to the carbon monoxide of illuminating gas or in the exhaust from an automobile. A preliminary period of unconsciousness is followed by a protracted delirious state. Then there may be a period of increased fatigability and difficulty in concentration followed by an interval of several weeks without symptoms before a chronic state of mental impairment is manifested.

Except for the first acute toxic reaction the clinical manifestations of carbon monoxide poisoning vary according to the amount of gas inhaled and to the characteristics of the person affected. In the suicidal cases the effects of gas poisoning are superimposed upon the personality disorder already present. In many cases with brief exposure there appear to be no after effects. Of the severely poisoned cases many die and others have permanent organic defects in the brain.<sup>36</sup>

<sup>34</sup> Karpman, B.: Bromide delirium, State Hosp. Quart., 7:66.

Diethelm, O.: On bromide intoxication, Jour. Nerv. and Ment. Dis., 71: 151, 278.

35 Slight, D.: Codeine addiction, Canadian Med. Assoc. Jour., 32:69.

<sup>36</sup> Steward, R. M.: A contribution to the histopathology of carbon monoxide poisoning, J. Neurol. and Psychopath., 1: 105.

Borman, M. C.: Carbon monoxide poisoning, Amer. Jour. Psychiat., 6:135.

Wolff, H. G.: A case of astasia-abasia and speech perseveration, following carbon monoxide poisoning, Jour. Neur. and Psychopath., 7: 213.

Yant, W. P. et al.: Studies in asphyxia, U. S. Public Health Bull., No. 211.

Illustrative cases. A young woman was found acting queerly in a tightly closed room with the gas turned on. She promised her mother that she would not make another suicidal attempt but the next morning she repeated the attempt and received emergency treatment until she regained consciousness. For several days she was in a mildly confused state and at times she seemed blind. Her memory for recent events was fragmentary and she had no recollection of her suicidal attempt.

Three months after this attempt she darted for an open window saying that she needed "an airing." A week's refusal to eat and silence except to say that she wanted to starve herself led to her admission to a psychiatric hospital.

On admission she complained of loss of memory and said her condition was due to being poisoned by bad liquor. Her mood varied from sadness to facetious gaiety. She was impulsive, resistive, made unpleasant remarks to other patients and behaved like a spoiled child. She was disoriented as to time, had only a fragmentary memory of the period of her illness and could not perform the most simple calculations.

During the next several months there was only slight improvement in her mental condition. She was unable to play cards because of her defective memory and she frequently had to inquire as to the way back to her room. Her memory for recent events then gradually returned. She developed a vague recollection of moving a couch prior to her suicidal attempt but did not recall turning on the gas or even that she had planned suicide. She was discharged as much improved ten months after her admission. A year later she reported that she had returned to her work but that she had been employed only at irregular intervals.

In another case of poisoning with illuminating gas the outcome was gross memory defect and dementia. These changes were observed in a middle-aged man who had lost his position, became depressed, drank to excess and then turned on the gas. For four weeks after he was resuscitated he was in a delirious state. He was then taken to a state hospital where he remained for a year. While there he was childish in his behavior and he walked about exposing himself, apparently unconcerned about himself or his surroundings. He showed a speech disorder and a poor memory.

Five years later he was admitted to a psychiatric clinic. In the

meantime he had been at home where he had been a problem because of his untidy habits and his general irresponsibility. On admission he appeared in good humor, said he was glad he was living but that he was very worried over his condition. He complained of poor memory and of a sense of bewilderment at times. He had no recollection of his suicidal attempt but knew about it because he had been told by his wife. His memory for some recent and remote events was grossly incorrect. He did not appear much concerned about his memory defects and was inclined to confabulate when his memory failed him. He appeared to be easily confused by questions requiring specific answers. The dates which he gave for his marriage varied as much as twenty years. Serial subtraction of 7 from 100 was performed as follows. "93—82—86—81—79—73—64—63—55—56—58—57—50—43—36—29—22—16—15—8—7—1." He was unable to remember the gist of test stories.

Physical and neurological examinations were negative except for slight deviation of the tongue to the left and hyperactive deep reflexes. The Wassermann in the blood and spinal fluid and the colloidal gold reactions were negative.

Prior to the gas poisoning this patient's memory had been excellent and except for a brief period of excessive drinking there had been no deterioration in his habits. As it was evident after six weeks' observation that his memory was permanently impaired and that he was mentally deteriorated he was discharged as unimproved.

#### EPILEPTIC PSYCHOSES

Many centuries have passed since Hippocrates<sup>37</sup> declared that epilepsy was no more sacred than any other disease and in spite of a vast amount of scientific investigation<sup>38</sup> our understanding of epilepsy has not been advanced very far beyond that of the ancient Greek physicians.

Loss of consciousness and convulsive seizures, the characteristic symptoms of epilepsy, are symptomatic of a great variety of organic and functional diseases. Thus far no very satisfactory explanation

38 Cobb, S. and Lennox, W. G.: Epilepsy, Baltimore, 1928.

Notkin, J.: A contribution to the subject of epilepsy, with special reference to the literature, Jour. Nerv. and Ment. Dis., 67: 321.

<sup>&</sup>lt;sup>37</sup> Temkin, O.: The doctrine of epilepsy in the Hippocratic writings, Bull. Johns Hopkins Hosp., Vol. 53, Supplement, p. 277.

has been found for the presence of these symptoms in a large group of individuals who have no other disease. Such individuals are said to be suffering from *idiopathic* or *essential epilepsy*.

About one in two hundred of the general population suffers from recurrent convulsive disorders. The first attack may occur in early childhood but with the majority of patients the first seizure is observed at or near puberty. A large proportion show no signs of the disorder until after the age of twenty. Convulsive disorders beginning after the age of forty are very likely to be associated with organic disease of the brain.

The many theories<sup>39</sup> offered regarding the causes of epilepsy are equalled by the number of remedies applied. No part or condition of the body has escaped attention, surgical as well as medicinal, in the search for the cause and cure. Extensive studies<sup>40</sup> of possible hereditary factors have led to the conclusion that there is a latent germ-plasm defect in the families of epileptics which may be expressed in the convulsive disorders of some of their members.

The outstanding manifestations of epilepsy are the generalized convulsive seizures, often referred to as grand mal attacks. The onset of an attack is sudden, with complete loss of consciousness, tonic spasm followed in a few seconds by clonic movements. Often there is some warning of the attack through peculiar sensory or motor experience called an aura. The attack lasts from one to five minutes and is followed by a brief period of stupor and then sleep. There may be only one attack in a year or at intervals of weeks or days. Sometimes one attack succeeds another in a condition of status epilepticus which may terminate in death. If the patient is standing

<sup>39</sup> Fay, J.: Convulsive seizures, their production and control, Amer. Jour. Psychiat., 10:551.

Pike, F. H. et al.: Some observations on experimentally produced convulsions, Amer. Jour. Psychiat., 9:259 and 10:567.

Spiegel, E.: The central mechanism of generalized epileptic fits, Amer. Jour. Psychiat., 10:595.

Thom, D. A.: Epilepsy and its rational extra-institutional treatment, Amer. Jour. Psychiat., 10: 623.

Watts, J. W. and Frazier, C. H.: Cortical autonomic epilepsy, Jour. Nerv. and Ment. Dis., 81: 168.

<sup>40</sup> Stein, C.: Hereditary factors in epilepsy, Amer. Jour. Psychiat., 12: 989. Guthrie, R. H. and Liebowitz, W. W.: Epilepsy in identical twins. A presentation of three pairs of twins, Jour. Nerv. and Ment. Dis., 81: 388.

Freeman, W.: Symptomatic epilepsy in one of identical twins, Jour. Neurol. and Psychopath., 15: 210.

at the beginning of a convulsive seizure he may fall and severely injure himself. During the attack he may bite his tongue and he may be incontinent.

These major attacks are contrasted with others of much less severity, called petit mal attacks. The minor attacks last only from a few seconds to a minute, often with only partial loss of consciousness and very little if any of the tonic-clonic spasms. The same patient may have at different times both the major and minor attacks.

In place of attacks there may be transient psychotic states called epileptic equivalents in which there may be depression, excitement, ecstasy or confusion. The patient may perform complicated acts including the commission of crime and subsequently have no recollection of what happened. As a rule epileptics who are subject to epileptic equivalents or who have psychoses should be regarded as dangerous individuals. Unless it is known that they are safe to be at large they should receive institutional treatment.

One variety of mental disturbance associated with epilepsy was presented by a thirty-five year old married woman who became acutely psychotic in connection with status epilepticus attacks. In spite of her epilepsy and the fact that she was a high grade moron she had been twice married and had two children by her second husband.

Her convulsive seizures began with menstruation at the age of fifteen. The attacks consisted of generalized convulsive movements with loss of consciousness and without aura. They were usually premenstrual and were preceded by periods of depression and tearfulness. Frequently she bit her tongue and lost sphincter control during an attack. At the age of twenty she had a series of convulsions lasting a week and subsequent amnesia for that period.

At the age of thirty she obtained a divorce from her first husband because of his infidelity and within a few months she remarried. Two children were born and then, a year ago, she had a second series of convulsions lasting a week. At this time she was restless or agitated, mute for two days, at times refused to eat and had visual and auditory hallucinations. Two weeks later she was admitted to a psychiatric clinic in a dazed, confused state in which she responded to questions only after someone shook her and shouted at her. Even then her responses were slow and made with an effort. Her condition improved rapidly and on the third day she apparently had recovered from the acute mental disturbance.

After her discharge from the clinic she continued to have premenstrual convulsive seizures in spite of sedative medication. Six months later a status epilepticus recurred. Within two days she had twenty-five generalized convulsive attacks. She then remained in bed and refused to eat. A week later she was readmitted to the clinic. Two days before readmission she saw monkeys in the window and talked to her dead mother.

She was tense and apprehensive, stared about the room and responded to questions and noises by throwing up both hands in a grotesque manner. Her mental condition gradually improved but a week after admission she could not remember where she lived. She admitted having both visual and auditory hallucinations. She said that her convulsions were due to a spell cast on her by a revengeful neighbor and that she would continue to have them until she found a bottle of urine that had been buried by this neighbor. Physical and laboratory examinations were negative.

As she recovered from her acute, psychotic, confused state she became antagonistic. She insisted that she was able to take care of herself and she threatened her husband with violence for keeping her in a hospital unnecessarily. After two weeks he yielded to her wishes and removed her against advice.

In recent years attempts have been made to gain a better understanding of the nature of epilepsy through a study of the kind of person who is subject to epileptic attacks. It has long been observed that the epileptic is self-centered, super-sensitive, domineering and that he appears to have an inherent defect in his ability to adapt himself to normal social life. On this account it has been assumed that he is constitutionally predisposed to the disease. It has also been suggested that as the epileptic fails to make satisfying adaptations tension gradually increases until it is released in violent motor activity in the form of a convulsive seizure. Moreover, each attack constitutes a regression to a stage of development in which reality does not exist and the indulgence in unconscious pleasures is therefore unimpeded.<sup>41</sup>

<sup>&</sup>lt;sup>41</sup> Clark, L. P.: Clinical studies in epilepsy, Psychiatric Bull., 1:60 and 2: 21, 483.

Clark, L. P.: The psychobiologic concept of essential epilepsy, Jour. Nerv. and Ment. Dis., 57: 433.

Bridge, E. M.: Mental state of the epileptic patient, Arch. Neurol. and Psychiat., 32:723.

From this viewpoint the convulsive seizures, the transient psychotic states and the epileptic equivalents may be looked upon as violent attempts to lessen internal disharmony. Unfortunately these periodic explosions give only temporary relief at the cost of a gradual loss of contact with reality. Since the occurrence of attacks is unpredictable the epileptic is cut off from many activities which tend to maintain normal interests and the gradual accentuation of the asocial personality traits makes contact with reality increasingly difficult. The course of the illness is therefore toward a state of apathy or mental deterioration.<sup>42</sup>

It is to be expected that convulsive disorders vary greatly according to the personalities involved<sup>43</sup> and to the extent that there are psychogenic factors. The prominence of these factors in some cases has led to a clinical differentiation of what was called hysteroepilepsy, a term which is no longer considered to have scientific value.

Other recurrent episodes with loss of consciousness have been described. A disorder called pyknolepsy<sup>44</sup> is remarkable for the great number of attacks which may occur in one day. They consist of transitory staring with cessation of activity from a few seconds to a minute.

Narcolepsy is characterized by attacks of sleep or trance-like states which often come on suddenly without apparent cause. The patient has practically no control over these attacks. He may fall asleep while talking or engaged in manual activity. He can be aroused but falls asleep again until the attack is over, a period lasting from several minutes to a few hours.<sup>45</sup>

<sup>42</sup> MacCurdy, J. T.: A clinical study of epileptic deterioration, Psychiat. Bull., 1: 187, 341.

Doolittle, G. J.: The epileptic personality—Its progressive changes among institutional cases, Psychiat. Quart., 6:89.

Notkin, J.: Is there an epileptic make-up? Arch. Neur. and Psychiat., 20:799.

<sup>43</sup> Diethelm, O.: Epileptic convulsions and the personality setting, Arch. Neurol. and Psychiat., 31:755.

Notkin, J.: "Affectepilepsy" and "hysteroepilepsy," Jour. Nerv. and Ment. Dis., 72: 135.

<sup>44</sup> Abramson, J. L.: Pyknolepsy, Jour. Nerv. and Ment. Dis., 82: 249.

<sup>45</sup> Cave, H. A.: Narcolepsy, Arch. Neurol. and Psychiat., 26: 50.
Wortis, S. B. and Kennedy, F.: Narcolepsy, Amer. Jour. Psychiat., 12

Wortis, S. B. and Kennedy, F.: Narcolepsy, Amer. Jour. Psychiat., 12:939. Notkin, J. and Jelliffe, S. E.: The narcolepsies, Amer. Jour. Psychiat., 13:733.

These attacks of sleep may be precipitated by acute emotional states, frequently those accompanied by laughter, and in this respect they resemble attacks of cataplexy in which there is complete loss of skeletal muscular tone in response to sudden emotional stress. In a cataplectic attack the jaw, eyelids and head may droop and there may be twitchings of the muscles and blurred vision. Within a few seconds this abnormal state vanishes spontaneously.

Attempts to isolate other similar clinical syndromes call attention to the limited value of assigning names to groups of symptoms when so little is known about etiology and when so little effort is made to learn the life history of the person affected. Through the study of allergic reactions<sup>46</sup> it appears that migraine may also be related to the recurrent convulsive disorders or perhaps more closely to the whole group of personality disorders.<sup>47</sup>

These recurrent paroxysmal disorders have been included with the toxic psychoses because the chief underlying disorder appears to be metabolic or physiologic. Our present knowledge does not justify rigid classification, in fact according to some groupings all of the toxic psychoses are called organic. There seems to be some advantage, however, in trying to isolate physiological disorders from those in which there is structural impairment of the brain. The division is necessarily somewhat arbitrary because many of the acute, psychotic manifestations associated with structural impairment are really metabolic in origin, indications of reactions of the remainder of the brain to its diseased portion.

 $^{46}\,\mathrm{De}$  Gowin, E. L.: Allergic migraine. A review of sixty cases, Jour. Allergy, 3:557.

Beauchemin, J. A.: Allergic reactions in mental diseases, Amer. Jour. Psychiat., 92: 1191.

<sup>47</sup> Knopf, O.: Preliminary report on personality studies in thirty migraine patients, Jour. Nerv. and Ment. Dis., 82: 270, 400.

## CHAPTER IX

## ORGANIC PSYCHOSES

# (Anergastic Reaction Types)

Definition. Organic psychoses are those which involve actual destruction of nervous structure in the brain. The degree of mental deterioration corresponds somewhat to the extent and site of the brain destruction.

Frequency. Organic psychoses constitute about 20 per cent of all psychoses. Practically all ages may be affected, some types of the psychoses being found characteristically at certain ages. With the exception of general paresis both sexes are affected with equal frequency.

Causes. It will be seen that the causes vary greatly according to the type of psychosis. Some of the most common causes are injury to the brain, atrophic senile changes in the brain, cerebral arteriosclerosis, embolism, thrombosis, syphilis and other infections, tumors and certain poisons. Besides this there are individual variations in susceptibility to different types of psychoses.

Symptoms. The early manifestations of these psychoses vary greatly according to the causes of the psychosis and to the individual predisposition toward psychoses. Memory and judgment defects are usually conspicuous. The most common manifestation is a mental deterioration which tends to be progressive. Psychotic symptoms tend to appear episodically and to become less acute as mental deterioration progresses.

Course and prognosis. In certain types of the organic psychoses the mental deterioration is slight and may progress slowly while in others it progresses rapidly and becomes profound. The seriousness of the particular illness and the outlook in general depend upon the amount and localization of brain destruction. In some illnesses there may be a gross amount of brain destruction with only a comparatively slight degree of mental deterioration. In other illnesses minute lesions may cause an extremely serious condition or even

death. Since the destroyed nerve cells are replaced by connective tissue and since scar tissue obviously cannot function as highly specialized nerve cells permanent loss of function and mental deterioration are inevitable.

#### TYPES OF ORGANIC PSYCHOSES

Some of the more common types of organic psychoses are as follows: organic delirium, traumatic psychoses, psychoses with cerebral arteriosclerosis, senile psychoses, general paresis, psychoses with cerebral syphilis, epidemic encephalitis, psychoses with brain tumor, psychoses with Huntington's chorea and psychoses with other brain or nervous diseases. The essential characteristics of these psychoses will now be given in some detail.

### ORGANIC DELIRIUM

In spite of the frequency with which delirious reactions accompany both organic and functional diseases they are seldom carefully studied and described. As a rule the manifestations are acute and they have the following characteristics: disturbance of consciousness or temporary reduction in the capacity to maintain contact with reality, usually referred to as clouding of consciousness; this is associated with some disturbance of the sensorium, i.e., of the ability to synthesize and interpret messages which are conveved via the sensory receptors and pathways to the cerebral cortex; partial or complete disorientation; memory deficiencies for the period of the acute symptoms; and a varying amount of psychomotor activity. There may be indistinct or slurring speech and at times the letters or syllables in words are misplaced. In the beginning of the delirious state a feeling of euphoria is common but as illusions and hallucinations appear the affect changes to apprehension and fear. The clouding of consciousness is manifested by increased difficulty in apprehending the actual situation, and by a diminished capacity to interpret correctly new and strange experiences, as well as by a diminished capacity to elaborate appropriate responses to the demands of the environment.

Disturbance of the sensorium often includes the formation of illusions and hallucinations and these distorted perceptions contribute to disorientation or the loss of ability to identify the surroundings as well as the loss of the ability to give the date and time of day correctly when the disorientation is complete.

Although the clinical manifestations of the various kinds of deliria shade imperceptibly into each other it is desirable to make note of those features which are peculiar to the different types of disorders. Organic delirium is a fairly common manifestation of pathological changes in the brain and is characterized by disorientation, clouding of consciousness which varies in degree from time to time and by occupation delirium. By the last is meant a tendency to give expression to the habitual trends of thought and to continue with the accustomed daily activities. Old people are inclined to return to former business activities or the scenes of their youth. Under the stimulus of visual hallucinations they may re-live the past with a pressure of psychomotor activity which is continuous and exhausting. A sailor is reported to have tried to climb a chimney imagining that he was putting up rigging and a school teacher behaved as though he was still in the class room.

The characteristics of the *toxic delirium* have already been described. This type of reaction is usually associated with infectious diseases and the symptoms appear more often during the course of a prolonged or high fever and especially after the patient has become weakened by disease and overwhelmed by the toxins of the infection.

In contrast to these forms of delirious reactions is the *psychogenic delirium* which is associated with purely functional disorders and and especially with hysteria.<sup>3</sup> In this type of reaction the patient is living out a dream-like experience which has its origin in the conflicts of his own unconscious and which may serve as an escape from a horrible experience in reality. He may have terrible dreams, and present somnambulistic states or paroxysmal attacks of excitement. An officer who had seen the head of a companion blown off lay in bed moving about restlessly, muttering to himself and passing his hand over his eyes as though he were witnessing some horrifying sight.

In the organic and toxic deliria there is usually no special trend of thought and the amnesia is fragmentary and confined to the period of time occupied by the delirious reaction but in the psychogenic deliria

<sup>&</sup>lt;sup>1</sup> Hanes, E. L.: Acute delirium in psychiatric practice, Jour. Nerv. and Ment. Dis., 39: 244.

<sup>&</sup>lt;sup>2</sup> Kirby, G. H. and Davis, T. K.: Psychiatric aspects of epidemic encephalitis, Arch. Neurol. and Psychiat., 5: 505.

<sup>&</sup>lt;sup>3</sup> Janet, P.: The Mental State of Hystericals, N. Y., 1901, Chap. 5. Janet, P.: A case of psychasthenic delirium, Amer. J. Psychiat., 1:319.

there is a special trend of thought and there may be amnesia for the events producing the emotional shock and for the content of the delirious experience.

#### REACTIONS TO HEAD INJURIES

The symptoms of brain injury vary greatly. An immediate result of a blow to the head may be concussion or skull fracture with intracranial bleeding and with loss of consciousness, shock, coma and death. The effects of head injury may appear after several hours, a few days or a number of weeks, in the form of apoplexy or convulsive seizures. There may be symptoms of meningitis, of intracranial hemorrhage or of abscess. Close observation of the patient's condition is imperative for several days following head injury so that shock, increasing intracranial pressure and other complications may receive prompt treatment.<sup>4</sup> This is necessary not only in dealing with the immediate condition but also as a means of preventing delayed post-traumatic conditions.

After the acute symptoms of head injury subside there may be an interval of apparent recovery and the patient may gradually develop a great variety of complaints such as headache, dizziness, impaired vision, tremors, vasomotor disturbances, difficulty with concentration, poor memory and anxiety over the consequence of the injury. These symptoms are usually dependent upon histological alterations in the brain and its meninges and they are also in part psychogenic in origin. Because of the effects of unrelieved intracranial hypertension they are often more marked following concussion than skull fracture. Gross injuries of the brain are likely to be followed by motor and sensory paralyses, aphasia, memory and judgment defects. Minor and apparently insignificant head injuries, especially if repeated, are likely to be followed by functional disturbances, traumatic psychoses and eventually in some cases by mental deterioration.

<sup>4</sup> Kennedy, F. and Wortis, S. B.: How to treat head injuries and appraise them, J. A. M. A., 98: 1352.

Kennedy, F.: Head injuries: effects and their appraisal, Arch. Neurol. and Psychiat., 27: 811.

<sup>6</sup> Wechsler, I. S.: Trauma and the nervous system, J. A. M. A., 104: 519. Schilder, P.: Psychic disturbances after head injuries, Arch. Neurol. and Psychiat., 91: 155.

Gordon, A.: Delayed mental disorders following cranial traumatism and their psychopathological interpretation, Jour. Nerv. and Ment. Dis., 77:259.

Post-traumatic amnesia. Among the spectacular accounts of mental disturbance are those of amnesia, a loss of memory which may be so complete that the patient is unable to identify himself. A study of cases of amnesia<sup>6</sup> has shown that there are many causes. Most of them are cases of hysteria or of post-epileptic fugue states but occasionally amnesia is the chief symptom following head injury with concussion of the brain. The extent and duration of the amnesia are dependent upon the underlying causes. In cases of post-traumatic amnesia there may be a persistent loss of memory for the period immediately associated with the accident. The patient's memory may be defective for a considerable period following the head injury (anterograde amnesia) and also for a period prior to the injury (retrograde amnesia). Similar memory defects may result from the shock and asphyxia associated with attempts at suicide by gas or by hanging.

Post-traumatic amnesia is illustrated in the case of a college student who fell, striking his forehead on the corner of a trunk. About an hour later he was found in a dazed condition. He attempted to attend classes the next day but he suffered too much with giddiness and severe occipital headache. It was discovered that his memory was defective for events subsequent to the injury.

A month later there was little improvement in his memory and he was admitted to a psychiatric clinic. He was then mildly anxious and impatient because of his poor memory. He could retain fairly well the happenings of the day but after a period of sleep he was unable to recall them. Mental processes in general were retarded. Physical examination was negative except for a scar on his forehead. There was no evidence of skull fracture.

Several days after admission he could not remember the name of the physician who saw him daily, that he had been presented to a group of students or that he had been visited by his parents the day before. He was able to learn lists of words and nonsense syllables and a short poem but as little as two hours of sleep caused him to forget everything. It was observed, however, that he was able to re-learn these tests in half of the time previously required. He was asked to make note of the events of the day and to memorize them.

<sup>&</sup>lt;sup>6</sup> Leavitt, F. H.: The etiology of temporary amnesia, Amer. Jour. Psychiat., 91: 1079.

Rabiner, A. M.: The influence of trauma in acute and chronic encephalitis, N. Y. State Jour. Med., 33:796.

After a month's training his memory extended to the next day without gross error but it was three months before he was able to resume his college work. The amnesia in this case appeared to be a direct result of the head injury as no important psychogenic factors were elicited.<sup>7</sup>

#### TRAUMATIC PSYCHOSES

Traumatic psychoses are due essentially to a great variety of brain injuries. They constitute less than one per cent of all psychoses and are extremely rare considering the relative frequency of head injuries. Some explanation for this is obtained from the fact that a large proportion of the cases studied have shown a tendency to mental disorders prior to the time of the injury.

A number of clinical varieties of traumatic psychoses have been described, among which the following are well recognized.

Traumatic delirium. This condition usually appears soon after the brain injury. It is preceded by partial or complete loss of consciousness and may appear episodically subsequent to injury. The delirium is characterized by a confused, dream-like state with restlessness and great inconsistency of statements. There is usually no memory of the injury or of the immediately subsequent events. In some cases the delirium may be accompanied by great excitement with impulsive and violent tendencies. The acute symptoms last from a few days to a few months and may be followed by a period of headache and dizziness. Extensive fabrications may be created for the period of memory loss.

Traumatic constitution. A very small proportion of individuals who have had brain injuries show a gradual post-traumatic change in disposition.<sup>9</sup> The symptoms of this are dizziness, persistent tendency to headaches, a great variety of unpleasant sensations, slowness of thought processes, unusual fatigability, suspiciousness, excessive emotional reactions to trivial situations, forgetfulness, convulsive

<sup>&</sup>lt;sup>7</sup> Syz, H.: Posttraumatic loss of reproductive memory and its restoration through hypnosis and analysis, Med. Rec., 144: 313.

 $<sup>^8</sup>$  Meyer, A.: The anatomical facts and clinical varieties of traumatic insanity, Amer. Jour. Ins., 60:373.

Bonner, C. A. and Taylor, L. E.: Traumatic psychoses, Amer. Jour. Psychiat., 92:763.

<sup>&</sup>lt;sup>9</sup> Kasanin, J.: Personality changes in children following cerebral trauma, Jour. Nerv. and Ment. Dis., 69: 385.

seizures and unusual susceptibility to alcohol and other toxic substances.<sup>10</sup> In some cases there are manifestations of latent tendencies to psychoses. These symptoms may continue indefinitely and become more pronounced.

Post-traumatic mental deterioration. Some of the individuals who have presented symptoms of the two clinical varieties just described show in addition mental deterioration. With this there may be disorder or loss of motor and sensory functions, epileptiform attacks, and psychotic manifestations. It is probable that in most cases the mental deterioration is not the direct result of brain injury but is due, in part at least, to the subsequent complications. In this connection it may be mentioned that brain injury is often merely a precipitating factor in the production of a great variety of psychoses. In many instances its relationship is purely incidental in the development of a psychosis.<sup>11</sup>

#### INTRACRANIAL VASCULAR ACCIDENTS

Hemorrhage, thrombosis and embolism affecting the brain vary greatly in their causes and manifestations and the prognosis in the case of an intracranial, vascular accident is necessarily dependent upon many factors. The outstanding characteristics of these accidents will be mentioned and an attempt will be made to differentiate them.

Subdural hemorrhage usually results from head injury with skull fracture. After the first acute symptoms disappear there may be a latent period of hours or weeks during which a hematoma gradually forms. Then there may be an abrupt onset of headache, disturbances of consciousness, convulsive seizures and other manifestations of intracranial hypertension.<sup>12</sup> This condition may be relieved by surgical intervention.

<sup>10</sup> Wortis, S. B.: Head injuries: effects and their appraisal, Arch. Neurol. and Psychiat., 27: 776.

Sands, I. J.: Anatomic consideration in clinical interpretation of brain injuries, Amer. Jour. Psychiat., 92. 771.

<sup>11</sup> Hadley, E. E.: The mental symptom complex following cranial trauma, J. Nerv. and Ment. Dis., 56: 453, 567.

Frazier, C. H. and Ingham, S. D.: A review of the effects of gunshot wounds of the head, Arch. Neurol. and Psychiat., 3:17.

<sup>12</sup> Friedman, E. D.: Head injuries: effects and their appraisal, Arch. Neurol. and Psychiat., 27: 791.

Subarachnoid hemorrhage is usually spontaneous and dependent upon pre-existing vascular disease, arteriosclerotic or luetic. It is manifested by sudden onset of headache and vomiting which are followed by loss of consciousness and signs of meningeal irritation and intracranial hypertension. Sedative medication and rest in bed are necessary.

Cerebral and intraventricular hemorrhages are likewise dependent upon pre-existing vascular disease. They occur in patients who have passed middle age and who have cardiovascular disease. Many of them have had a previous apoplectic attack. Sudden loss of consciousness is followed within a few hours or days by stupor, coma and death.<sup>13</sup>

Cerebral hemorrhage used to be regarded as the most common cause of an apoplectic stroke but it is now known that apoplexy is much more frequently caused by cerebral thrombosis. Thrombosis is usually dependent upon arteriosclerosis or luetic endarteritis. For days or weeks prior to the vascular accident the patient may have been troubled with headache, dizziness, insomnia, feelings of pressure in the head, irritability, forgetfulness and transient speech disturbances. This comparatively slow onset of symptoms serves to differentiate thrombosis from hemorrhage or embolism. The paralyses, speech disturbances and convulsive seizures which may result from thrombosis or embolism often suggest a more circumscribed lesion in the brain than is the case with hemorrhage.

Cerebral embolism is more common in young people who are suffering with subacute, bacterial endocarditis. The onset of symptoms is sudden as in the case of hemorrhage but complete loss of consciousness is much less frequent with embolism than with hemorrhage.

#### PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS

These psychoses are due essentially to sclerosis or hardening of the arteries of the brain. There is usually more or less general arteriosclerosis but in cases of psychoses with cerebral arteriosclerosis the symptoms of brain disorder appear first or predominate. These symptoms are due in part to gradual thickening of the walls of the arteries with consequent lessening of the lumen. The diminution in size of the lumen causes the supply of nourishment to the brain to be

<sup>13</sup> Globus, J. H.: Intracranial hemorrhage. Its anatomical forms and some of their clinical features, N. Y. State Jour. Med., 36:681.

gradually lessened and finally insufficient. Symptoms may also be due to embolism, rupture or thrombosis of sclerotic blood vessels. All of these conditions cause serious interference with the nutrition of the brain and result in the death of groups of nerve cells and areas of softening. These dead cells are gradually absorbed and replaced by scar tissue. Whether or not psychotic symptoms appear depends upon the extent and location of brain destruction and also upon the latent psychotic tendencies of the person affected.

The causes of cerebral arteriosclerosis are essentially the same as those of general arteriosclerosis. There seems to be a definite family tendency. Symptoms usually manifest themselves between the ages of fifty and sixty-five. These psychoses constitute about five per cent of all psychoses, and are therefore not especially common considering the frequency of arteriosclerosis.

In accordance with the distribution and the extent of brain destruction, there is considerable variety in the symptoms. For instance, the interference with brain function in an apoplectic attack or stroke may be serious enough to cause abrupt loss of consciousness, with death in a few hours. In case of recovery from the immediate effects there is often permanent residual paralysis. On the other hand, as a result of the gradual production of minute areas of softening in relatively unimportant parts of the brain, there may be a slowly progressive reduction of mental efficiency. In general the constant symptoms are those of a mental deterioration which progresses more or less rapidly according to the frequency and severity of the episodic brain destruction. There are usually fatigability, irritability, difficulty in thinking, increasing failure of memory and a loss of emotional control characterized by laughing and weeping from trivial causes. The particular psychotic manifestations, such as depression, apprehensiveness, suspiciousness or paranoid ideas, are dependent upon latent tendencies in the personality. There may be episodes of marked confusion or epileptiform attacks. Usually there are headaches, dizziness, fainting attacks, speech difficulties and weakness or paralysis of parts of the body in accordance with the distribution of lesions.

With the increasing destruction of brain tissue it is inevitable that some degree of mental deterioration must follow. This demen-

<sup>&</sup>lt;sup>14</sup> Rhein, J. H. W., et al.: Mental conditions in the aged, Arch. Neurol. and Psychiat., 20: 329.

tia of the arteriosclerotic patient has some distinctive features. The memory defect is usually patchy and may vary from time to time. There is difficulty in elaborating new impressions and in correlating the events of the past history. As the deterioration progresses the inability to concentrate leads to gross discrepancies in statements and obvious mistakes in the solution of the most simple problems. The patient loses the capacity to progress from one topic to another and at the same time he tends to cling to what has already been elaborated. In other words there is a perseveration of topics or words. Along with this are usually noted such phenomena as aphasia, agnosia and apraxia. Although the patient is usually forgetful the ability to recall recent events may be well preserved. In contradistinction to other forms of dementia that of the arteriosclerotic is characterized by unusually good preservation of the personality. The facial expression remains in harmony with the actual situation and shows a normal emotional response to the approach of other people. The patient not only realizes his mistakes but apologizes for having made them.

This capacity to appreciate the seriousness of the illness is an important contributing factor in the attempt to escape from reality by means of a psychosis. It is also a determining factor in the attempts to hasten the inevitable by means of suicide. <sup>15</sup>

On account of the varying degree and frequency of episodic brain destruction the course of these psychoses varies considerably. A person may die as the result of an apoplectic attack or there may be several apoplectic attacks with intervals of several months during which the patient's condition appears to be stationary. Other people whose episodes are not so serious may live many years after the onset of symptoms but it is unusual for the arteriosclerotic to live to be over seventy years of age.

Illustrative cases. The remarkable preservation of a personality in spite of a series of apoplectic attacks is shown in the case of a druggist who was fifty-four years old at the time of admission. He had been in good health until three years previously when he abruptly developed a weakness of his left side, including the left side of his face. The attack began at night and the weakness increased the following day. He could make only gross movements at first but he

<sup>&</sup>lt;sup>15</sup> Hoch, A.: The dementia of the cerebral arteriosclerosis, Psychiatric Bull., 1:306.

gradually regained his strength until at the end of a month he returned to work, apparently recovered.

Four months later he had a second attack consisting merely of a feeling of weakness and nervousness which disappeared in two weeks. Within three weeks he had a similar attack, without paralysis, which incapacitated him for three months.

His fourth attack occurred a year before admission. It began with an "awful pain" in the back of his head, neck and in his temples. Three days afterward he failed to recognize anyone except his wife, had difficulty finding words and didn't seem to know what he was doing or saying. After four weeks spent in a sanitarium he still had difficulty remembering names and in finding words.

The last attack began a month before admission with weakness of the right arm and leg and an increased difficulty in finding words. When he came to the hospital it was noticed that he laughed or cried spontaneously or with little provocation. He was well aware of his illness and there was no obvious impairment of his memory or judgment. There was evidence of well advanced arteriosclerosis and of the residuals from his hemiplegic attacks. His aphasia was so marked that it was impossible to make a routine mental examination.

The following excerpt from an interview is illustrative of his aphasic disorder:

What hurts? "My whatchacallem, you know—what do you call this?" (points to leg) "my stomach—you know—it's so and it's regular turn out—it's just like people do something to you when you've got something wrong with you—I know what I want to say, but I can't say it."

Where does it hurt? "It hurts me whenever this thing gets going" (pointing to his bladder). "It hurts" (laughing) "that thing—I don't know what you call it—to tell you the truth, I'm all mixed—if you take that thing and crack it in half it hurts—if you don't stop it, it hurts like the dickens,"

He also was easily confused by any complex situation and he showed a tendency to perseveration. On request he put out his tongue and closed his eyes but then when asked to hold up his right hand he repeated the words "right hand" and closed his eyes. When asked to put his right hand on his left ear he held up both hands in an uncertain way saying, "right hand, left hand." The request was repeated and the patient again failed to execute the proper move-

ments. He volunteered that he was "a little uncertain." Attempts to identify objects shown to him proceeded as follows: Watch—"Clock." Pencil—"I know what it is but I can't tell." Tongue depressor—"That's similar to the other—you can use it with your hands" (opening and closing hands). Penknife—"The same thing—you use your left hand."

There was little change in the patient's condition until three months later when he developed an acute appendix which ruptured. After a few days with a high temperature, marked retraction of the neck, and a muttering delirium, he died.

In a second case there was no apoplectic attack until shortly before death at the age of fifty-seven. Eight years prior to this the patient, after a long and successful business career, became restless, depressed, said he had committed unpardonable sins and made an attempt at suicide. His blood pressure had been found to be 250 and he had realized that he was failing to meet the responsibilities of his position.

Within six months his illness had developed into an agitated, hypochondriacal depression and he was then admitted to a psychiatric hospital. His responses then were slow and hesitating regarding personal matters. He felt he was the wickedest man on earth and that he was caught like a rat in a trap. His remote memory was adequate but retention was poor except for digits. He was unable to recall any of a test story he had read. He expected that the physician was going to dispose of him in some way.

His heart was considerably enlarged and there was evidence of marked general arteriosclerosis and of chronic, interstitial nephritis. His blood pressure was 190/125 on admission but within a few days it dropped to 165/110. He weighed only 120 pounds although a few years previously he had weighed over 200 pounds.

During the first year in the hospital there was some improvement in his physical and mental condition but he was continuously apprehensive of an "awful upheaval." He was troubled with buzzing in his ears and with noises in his head, resembling the chirping of birds. He said that pictures of familiar scenes, which included his brothers, were thrown on the wall at night. He saw his brothers in distress, heard them calling, and thought they were being murdered. In spite of this he was alert to his surroundings and aware of the nature of his illness. He said, "My head is not right—I worked too hard and worried too much." He continued to express depressive, hypo-

chondriacal ideas. He declared that he was unable to eat and that his bowels did not move. "I'm all dried up—I'm actually through unless you want to keep me for exhibition purposes. I'm the worst case of this kind that ever was. I know I'm a coward. I think I'm a devil. There is something I have done. I am the victim." On two occasions he attempted to drown himself in the bathtub.

Two years after admission he had a fainting spell but within a few days he was able to attend his brother's funeral. He occasionally made trips to his home. His systolic pressure gradually rose until it was 200 or more most of the time but there was no evidence of vascular accident until over seven years after admission. He then developed weakness of the left side of his face and of the right side of his body. Five weeks later he died.

Post-mortem examination disclosed general arteriosclerosis, fibrous myocarditis, chronic nephritis and a recent arteriosclerotic softening of the left external capsule. Histologic examination of the brain showed marked arteriosclerosis of the large and middle-sized vessels with numerous small areas of softening and of gliosis.

#### SENILE PSYCHOSES

Senile psychoses are essentially exaggerations of some of the characteristics of old age. In all persons some parts of the body grow old faster than others. It happens in a small proportion of individuals that the effects of age are manifested first in disordered brain function. Senile psychoses constitute about ten per cent of all psychoses.

In the typical senile psychosis mental deterioration is roughly proportional to the amount of brain cell degeneration. Examination of the brain in cases of uncomplicated senile dementia shows loss of weight due to general atrophy. The convolutions are narrowed, the sulci widened, the ventricles dilated and there is a loss of nerve fibres and cells as well as a deposition of pigment in neuroglia and nerve cells. In addition to this there may be numerous small necrotic foci depending upon the extent to which arteriosclerotic degeneration is present.<sup>16</sup>

<sup>16</sup> Lambert, C. I.: A Clinical-anatomical classification of the senile and arteriosclerotic disorders, Studies in Psychiatry, N. Y. Psychiatric Inst., Vol. I

Uyematsu, S.: On the pathology of senile psychosis, J. Nerv. and Ment. Dis., 57:1, 131, 237.

As a rule symptoms develop very gradually and do not appear before the age of sixty. A person's age, however, may give little indication of mental efficiency. It is well known that some individuals are more capable at eighty than others are at sixty. Early symptoms are seen in the gradual loss of mental efficiency which occurs in most This is manifested by the following: narrowing of elderly persons. the field of interests; stereotyped opinions and habits which are difficult to modify; intolerance of anything new; increasing tendency to reminisce, particularly in regard to events many years past; unfavorable criticism of the present in making comparison with the past; short-lived attempts at the execution of poorly constructed plans or schemes; inability or unwillingness to recognize and yield to failing capacities; difficulty in thinking, except in terms of precedents; a tendency to be easily confused; suspiciousness, irritability, fatigability and forgetfulness, especially for recent events. Much of this is commonly summarized by the word "childishness."

Psychotic symptoms are simply exaggerations of the above symptoms. The loss of memory for recent events is in striking contrast to the retention of memory for remote events, including those of early life. The confusion may become so marked that the patient has no appreciation of his surroundings even though he be at home and in the presence of friends and relatives. Great restlessness may be observed particularly at night. There may be deterioration of moral and ethical standards, depressive of paranoid developments. According to the prominence of certain of these symptoms the following clinical varieties have been described:

Simple deterioration is characterized by general reduction in intellectual capacities with memory defects regarding recent events, narrowing of interests, irritability, suspiciousness, restless wandering, and misidentification of the surroundings with lack of appreciation of time, especially at night.

Presbyophrenic type is characterized by disorientation and gross memory defects regarding the recent past. These defects are often supplied by fabrication which includes absurd repetitions and contradictions. At the same time there is an appearance of alertness and attentiveness with ability to carry on a casual conversation. A person having this type of psychosis may have an extensive conversation with a stranger and an hour later have no recollection of the conversation or of the person with whom it was held.

Delirious and confused types are characterized by markedly confused or delirious states which are more likely to occur during the early stages of the psychosis. Similar symptoms appearing shortly before death may be due to physical disintegration or to terminal complicating disease.

Depressed and agitated types are characterized by the prominence of agitation and feelings of depression. Patients suffering from these types are often suicidal. Memory and retention defects are present as in other types.

Paranoid type is characterized by the prominence of delusional interpretations, especially those of persecution and grandeur. Some patients have ideas that they are being poisoned so that property may be inherited. They may complain that they are being robbed or they may have delusions of marital infidelity. Men are especially likely to develop delusions of sexual vigor which sometimes result in sexual misconduct or in unfortunate marriages.

Pre-senile type or Alzheimer's disease is characterized by its insidious development, a comparatively early onset of symptoms and a rapidly progressive course which terminates in profound dementia. It may be accompanied by aphasia and apraxia. The changes in the brain are similar to those of senile psychoses with the addition of gnarled skeletal neurofibrillar rests and numerous senile plaques. This disease is extremely rare compared with other types of senile psychoses.<sup>17</sup>

A rare variety of senile psychosis, called *Pick's disease*, is characterized by progressive and profound dementia beginning after middle age and due to gross atrophy of circumscribed areas of the brain. This atrophy often involves speech areas and results in an aphasia which is not apoplectic in onset but of insidious development. The symptoms and clinical course in many ways suggest those of general paresis. In the beginning a deterioration of habits of living is noticed

<sup>17</sup> Alzheimer: Über eine eigenartige Erkrankung der Hirnrinde, Centrb. f. Nervenheilk. u. Psych., Vol. 30, 1907.

Lambert, C. I.: The clinical and anatomical features in Alzheimer's disease and related conditions, Psychiat. Bull., 1:411.

Ferraro, A.: The origin and formation of senile plaques, Arch. Neurol. and Psychiat., 25: 1042.

Rothschild, D.: Pathologic changes in senile psychoses and their psychobiologic significance, Amer. J. Psychiat., 93: 757.

Rothschild, D.: Alzheimer's disease, Amer. Jour. Psychiat., 91:485.

without gross impairment of memory. This is followed by manifestations of senile dementia which progresses until the patient loses all initiative, is bedridden, incontinent and dies of intercurrent infection. Gross brain atrophy may be confined to the frontal and temporal regions. The senile plaques and the fibrial changes of Alzheimer's disease are absent.<sup>18</sup>

Course and prognosis. The senile psychoses may extend over many years with gradually increasing mental deterioration. They are usually terminated by death from accident or complicating disease.

Characteristic senile changes were observed in a man who continued active and capable in his business until the age of seventy-five. It was then noticed that he made mistakes in calculation and that his judgment was becoming impaired. Two years later he was slovenly in his habits and his speech was indistinct. He was finally admitted to a psychiatric hospital at the age of eighty-one. For six months he had required the constant attention of a nurse. He was irritable, excitable, failed to recognize old acquaintances and had become restless, confused and noisy, particularly at night.

On admission he was restless, irritable and frequently attempted to get out of bed. He seemed indifferent to his surroundings and was completely disoriented. Most of the time he mumbled unintelligibly but by listening attentively it was discovered that he was making repeated, disconnected references to his hankerchiefs, his hat, his vest, his home, his age, the window and the door. He was untidy and apparently unconcerned about soiling himself and his room.

Physical examination revealed little except that he was a feeble, poorly nourished old man with palpable arteries and emphysema. His blood pressure over a period of three years had varied from 165 to 180 and at the time of admission was 150/80. Blood and urine examinations were negative.

During the first year he was in the hospital his physical condition improved somewhat and he was able to remember from day to day the names of the nurses and physicians who took care of him. Most of the time he was irritable, querulent and protested loudly in an

<sup>&</sup>lt;sup>18</sup> Kahn, E. and Thompson, L. J.: Concerning Pick's disease, Amer. Jour. Psychiat., 13: 937.

Thorpe, F. T.: Pick's disease (circumscribed senile atrophy) and Alzheimer's disease, Jour. Ment. Sci., 78: 305.

unintelligible way when a stranger entered his room or when he was disturbed by the necessary daily routine. When annoyed by the presence of another patient he addressed the nurse with, "Come here. The swine has not been made to leave. I will go myself. I'm a hundred thousand years. I might be dead to-morrow. I want to get a bath and leave. I'll not stay any longer." His speech gradually became less and less distinct apparently because of dysarthria. His personal habits have improved and he is very seldom incontinent. He is now eighty-four years old. His relatives state that he has always been stubborn, aggressive, outspoken, irritable and fault-finding. These characteristics are well preserved in spite of the senile changes.

#### GENERAL PARESIS

This psychosis, frequently called general paralysis or dementia paralytica, is due essentially to a subacute or chronic inflammatory and degenerative process involving chiefly the cerebral parenchyma. This process in turn is the result of a syphilitic infection of the brain. Spirocheta pallida are found to be widely disseminated throughout the brain and great masses of them are localized within the cortex. As a rule the destruction of gray matter is greater in the frontal lobes where the convolutions are visibly shrunken due to loss of ganglion cells. In this region the pia-arachnoid is thickened and gives the impression of frosted glass. The ventricles are dilated and there is a granular ependymitis especially in the fourth ventricle. A perivascular exudate consisting mainly of lymphocytes and plasma cells and confined strictly to the sheaths of the blood vessels is peculiar to general paresis. 20

It is only a little more than a century ago that this disease was clearly recognized. Many theories have been propounded regarding its etiology but even before the spirocheta pallida were demonstrated in the brain<sup>21</sup> there was no longer any doubt but that general paresis was a form of syphilis.

<sup>&</sup>lt;sup>19</sup> Dieterle, R. R.: Spirochetosis of central nervous system, Amer. Jour. Psychiat., 7: 547.

<sup>&</sup>lt;sup>20</sup> Dunlap, C. B.: The pathology of general paralysis, Studies in Psychiatry, N. Y. Psychiatric Inst., Vol. 3.

Campbell, C. M.: Focal symptoms in general paresis, Studies in Psychiatry, N. Y. Psychiatric Inst., Vol. 2.

<sup>&</sup>lt;sup>21</sup> Moore, J. W.: The occurrence of the syphilitic organism in the brain in paresis, Jour. Nerv. and Ment. Dis., 40: 175.

In spite of many years of education regarding venereal disease and the improved methods of treating syphilis this disease is directly responsible for more than ten per cent of all psychoses. Men are affected about three times as often as women but this is due to the fact that syphilis is more prevalent in men. It is the opinion of some authorities that the spirocheta invade the central nervous system soon after the primary infection but the clinical manifestations of general paresis may not be observed until thirty years later. As a rule however the symptoms appear most often between five and ten years after the primary infection and between the ages of twenty and sixty.<sup>22</sup>

Symptoms. The early symptoms are so varied that almost any psychosis may be simulated.<sup>23</sup> It appears that the toxic action of the syphilitic infection interferes with conscious control to such an extent that latent tendencies to psychoses become manifest. Among some of the more common early manifestations are the gradual and apparently unaccountable changes in character. Former ideals and standards of living are replaced by failure to attend to social and business engagements, forgetfulness, defective judgment, pursuit of reckless schemes, carelessness of personal appearance and habits, neglect of family and former associates, gross self indulgences and failure of moral and ethical senses. In spite of this there may be feelings of unusual good health and ideas of great power and wealth. Periods of confusion with much useless activity and fits of rage or violence over trivial annoyances are frequently observed. The psychosis may be ushered in by headaches, dizzy or fainting spells, speech difficulties or convulsive attacks, usually accompanied by brief periods of loss of consciousness. It is noteworthy that the patient as a rule has little appreciation of changes which are obvious to friends and relatives.

Often definite evidence of general paresis is found by laboratory examinations of the spinal fluid before clinical symptoms have appeared. This is indicated by the presence of more than twelve cells per cmm., positive Wassermann and globulin tests and a colloidal

<sup>&</sup>lt;sup>22</sup> Darling, I. A.: General paralysis of the insane during senescence, Amer. Jour. Psychiat., 4:751.

<sup>&</sup>lt;sup>23</sup> Schube, P. G.: Emotional states of general paresis, Amer. Jour. Psychiat., 91: 625.

gold reaction which in a typical case would show a paretic curve of 5555432000.24

The initial psychotic manifestations may temporarily disguise an underlying and comparatively rapid mental and physical deterioration. This deterioration often does not become obvious until after the first acute symptoms have subsided. In some cases the first remission may be so complete as to give the appearance of a return to the original normal condition. That this is only apparent becomes evident in the course of a few weeks or months when another exacerbation of acute symptoms appears. When this subsides the evidence of mental deterioration is usually more obvious. This process may be repeated several times, with gradually lessened intensity of the acute symptoms but with an ever increasing mental deterioration.

In few diseases is the physical and mental weakening of the entire individual so striking. Weakness of the muscles of expression causes loss of folds and lines in the skin with the result that the person may appear considerably younger. This appearance, however, is in striking contrast to the actual general muscular enfeeblement. Among other physical signs there may be irregular, unequal, Argyll Robertson pupils, ocular palsies, optic atrophy, irregular tremor of lips, tongue and fingers, speech disorder, writing defect, exaggerated knee jerks if tabes is not present, or absent knee jerks, positive Romberg, and other tabetic signs according to the extent to which a syphilitic infectious process has altered the functions of the spinal cord.

Unless death intervenes prematurely the deterioration becomes so marked that there is little left of the original individual except an inert mass, bedridden, incontinent and helpless, with practically no appreciation of surroundings or capacity for self identification. Attempts at speech usually result in nothing more than stammered, distorted, incoherent sounds, with perhaps an occasional intelligible syllable or word.

Course and prognosis. The course of the illness is one of gradual

Menninger, W. C. and Bromberg, L.: The colloidal gold reactions in 500 cases of neurosyphilis, ibid., 20: 383.

<sup>&</sup>lt;sup>24</sup> Menninger, W. C. and Bromberg, L.: The blood Wassermann test in 500 cases of neurosyphilis with positive cerebrospinal fluids, Jour. Lab. and Clin. Med., 20: 698.

mental deterioration. In some cases this proceeds by stages and as a rule it is most rapid when there are repeated and prolonged convulsive seizures. An extremely rapid course may be illustrated by that of a patient who became ill rather abruptly with what appeared to be an hysterical attack. He was admitted to the hospital a week or two later, was found to be suffering from general paresis and died within thirteen days after a series of convulsive attacks lasting about thirty-six hours. An example of the other extreme is seen in a patient who presented typical symptoms at the beginning but in whom the syphilitic process had become arrested, with the result that fifteen years later he was only mildly deteriorated and somewhat paranoid.

A tendency toward spontaneous remissions is one of the characteristics of general paresis. During these remissions there may be a partial or complete disappearance of the acute symptoms for a period of several weeks or months.<sup>25</sup> Since the introduction of treatment by means of tryparsamide and malaria the percentage and duration of remissions have increased.<sup>26</sup> In the past ten years there has also been a reduction in the number of cases of general paresis admitted to hospitals but this may be due in part to the earlier recognition of the disease and the education of the public regarding the advantages of early treatment.

Although the treatment of general paresis has been made more effective the cases in which the syphilitic process is permanently arrested are rare. The average length of life after the definite onset of symptoms is still from two to four years. Death usually occurs

<sup>25</sup> Raynor, M. W.: Remissions in general paralysis, Arch. Neurol. and Psychiat., 12:419.

<sup>26</sup> Kirby, G. H. and Hinsie, L. E.: Tryparsamide treatment of general paralysis, State Hospital Quarterly, 12:53.

Bunker, H. A.: Recent methods in the treatment of general paralysis, Amer. Jour. Psychiat., 8:681.

Hoverson, E. T.: General paralysis. Nonfever treatment by cerebral lipoids and tryparsamide, Amer. Jour. Syphilis and Neurol., 18:221.

Solomon, H. C. and Epstein, S. H.: Dementia paralytica. Results of treatment with malaria in association with other forms of therapy, Arch. Neurol. and Psychiat., 33: 1008, 1216.

Hinsie, L. E. and Blalock, J. R.: Treatment of general paralysis by radiothermy, Psychiat. Quart., 6: 191.

Kopeloff, N. and Blackman, N.: Spirochaetal findings in the brains of paretics treated with malaria, Amer. Jour. Psychiat., 13:21.

after a series of convulsive seizures or from some complicating disease such as pneumonia.

Excerpts from illustrative cases. A fairly typical onset of symptoms and the subsequent mental deterioration is seen in a successful business man and prominent public official, fifty-one years of age, who received the primary syphilitic infection ten years before the beginning of the psychosis.

About a year before admission to the hospital the patient's friends noticed that he talked too much at inopportune times and told vulgar jokes which he alone thought funny. He lacked interest in his work and instead of attending to it he talked all day. Later he became forgetful, talked a great deal about the past and did not readily recognize his friends. He became careless in his attire, went through the halls of a hotel partly dressed and in other ways was unaccountably odd in his behavior. His friends advised him to consult a physician and he was then referred to the hospital.

On admission he was coöperative, agreeable, extremely overtalkative and rambling in his conversation. He talked in a loud tone of voice and told smutty jokes. He ate with his fingers and drank out of his saucer. His memory was poor and at times he was somewhat confused. There was weakness of the muscles of the left side of his face, sluggish pupillary reaction to light stimulation and tremor of the tongue, facial muscles and hands. Laboratory tests of his spinal fluid were typical for general paresis. He had no appreciation of the fact that he was sick or that there had been any change from his normal condition. In spite of intensive treatment he deteriorated rapidly. Within a few months he was confused, indifferent to his surroundings and subject to brief fits of irritability. He could however be aroused to show some of his former cordiality and gracious manner but there was no indication that he appreciated his actual condition. His personal habits had become grossly deteriorated and he was at times incontinent.

Another patient shows the type of memory defects commonly observed during the course of the psychosis.

What year were you born? "69."

How old are you now? (Thinks.) "39." (He was actually 47.)

What year is this? "1819."

In what year were you born? "69."

And this year is? "17—1917."

How old are you? "Will be 41."

You were born in 1869 and this year is? "71" (smiling), "79."

You mean you were born in 79? "No,—69."

And this year is? "1719."

When were you married? "1879."

Since speech disorders are most readily shown by attempts to repeat test phrases, the patient was asked to repeat "Methodist Episcopal," "truly rural," and "particular popularity." The following distortions resulted:

"Meth-th-tha-dist Ezpispal." "Metic-piscopapal." "Truly ruly." "Truly rur-rl." "P-particular popillarity." "P-particular-rpopil-lar-r-ity."

An example of grandiose delusions in which the content is obviously absurd is seen in the following:

Have you much money? "Trillions—it took fifteen weeks to count my money in a New York bank." (He was actually financially dependent.)

How much did you say you have? "It took a thousand men five weeks to count my money and my wives—I'm twenty-one years old (actually forty-nine) and I have diamond teeth."

Attempts at conversation with a very deteriorated patient resulted in the following sterotyped jumble of phrases:

How do you feel? "Score card—see pop to-day—Monday—where—going to rain—to-day Jack in office—money—rain to-day—go to office—no school to-day."

#### JUVENILE GENERAL PARESIS

The psychotic manifestations of juvenile general paresis are essentially the same as those of the adult form with the exception that they usually appear before the age of fifteen and are therefore dependent upon the age and development of the patient. The adult form of paresis is a result of acquired syphilis while the juvenile form is a manifestation of congenital syphilis. It is assumed in the juvenile cases that the mother also is syphilitic although this has been demonstrated in only 56 per cent of the cases.<sup>27</sup> The relatively high incidence of neurosyphilis in these families suggests a familial predisposition to this form of syphilis. Only about 700 cases of juvenile

<sup>&</sup>lt;sup>27</sup> Menninger, W. C.: Juvenile dementia paralytica, Arch. Int. Med., 55: 626.

paresis have been reported and it is therefore a comparatively rare disease.

Studies of the pathology in juvenile cases have shown that the cortical changes and the ependymitis are similar to the adult form but more extensive atrophy and meningitis as well as the development of hydrocephalus are characteristic of the juvenile form.<sup>28</sup>

The clinical manifestations of juvenile paresis are dependent in large part upon the interference with growth which results from the congenital syphilitic infection. More than a third of the cases show retarded physical development and 40 per cent are mentally retarded. There may be a history of convulsive seizures for several years prior to the time that a diagnosis of juvenile paresis is made and these seizures are not uncommon symptoms of the disease.<sup>29</sup>

The diagnosis is made by means of clinical evidence of congenital syphilis, the psychotic manifestations of general paresis and the neurologic and serologic findings characteristic of neurosyphilis. The neurologic syndromes of juvenile paresis are more frequently observed and are more diverse and more advanced than are those of adult paresis. They include the signs of tabes, optic atrophy, fixed pupils, extra-ocular palsies, and the speech defects characteristic of adult paresis.<sup>30</sup>

The treatment recommended for paresis is the same in both the adult and juvenile forms. Thus far the results obtained in juvenile paresis are extremely disappointing. The prognosis is better in proportion to the maturity of the patient before the onset of symptoms. Apparently very few survive until adult life and cases are reported in which treatment started at birth did not alter the progress of the disease.<sup>31</sup>

#### PSYCHOSES WITH CEREBRAL SYPHILIS

In these psychoses the symptoms are due to syphilitic meningitis, obliterative endarteritis and to gummatous formations. As the

- <sup>28</sup> Menninger, W. C.: Juvenile dementia paralytics, Arch. Pathology, 19: 316.
- <sup>29</sup> Menninger, W. C.: Juvenile paretic neurosyphilis studies, Jour. Nerv. and Ment. Dis., 81:489.
- <sup>30</sup> Menninger, W. C.: Juvenile dementia paralytica, Arch. Neurol. and Psychiat., 34:243.
- <sup>31</sup> Menninger, W. C.: Juvenile paretic neurosyphilis studies, Amer. Jour. Syphilis and Neurology, 19: 257.

blood supply is cut off from localized areas due to the endarteritis there are signs of focal lesions. The gummatous formations slowly cause focal symptoms as well as signs of intracranial pressure.

In all cases of cerebral syphilis there is evidence of meningitis. The symptoms may appear within a year after the primary infection in the form of intense, persistent headache, dizziness, vomiting, convulsions, motor and sensory disturbances and paralyses. The onset of these symptoms is usually rather acute and associated with them are periods of confusion, loss of consciousness and alternating delirious and comatose states.

As a rule the personality is much better preserved than in cases of general paresis. The Argyll Robertson pupil, speech disturbances, the grandiose ideas and absurd trends of the general paretic are rarely observed in this form of syphilis. Memory is defective for the acute periods of the illness and memory disturbances may be a part of a progressive mental deterioration dependent upon the pathological changes in the brain.

Death may occur early in the illness but as a rule the acute symptoms subside gradually and the infectious process may remain quiescent for a period of years. Anti-luetic therapy should be instituted as soon as possible and the response to treatment is usually much more favorable than in cases of general paresis. In many instances the symptoms indicate a more generalized syphilitic process in the brain and some cases eventually develop the typical manifestations of general paresis.<sup>32</sup>

The illness of a man fifty years old at the time of admission is illustrative of psychotic manifestations of cerebrospinal syphilis. His father was an irresponsible gambler, three of his five brothers had acquired syphilis and one of these died of paresis.

The patient followed the trend in his family by indulging in venereal and alcoholic excesses in addition to smoking opium. Before he was of age he had acquired both gonorrhea and syphilis.

After five weeks' treatment with mercury and potassium iodide he was apparently in good health until the age of thirty-six when he began to be troubled with vertigo and double vision. These symptoms disappeared following salvarsan, mercury and iodide treatments but two years later his gait became unsteady, he felt stiff and he com-

<sup>&</sup>lt;sup>32</sup> Henderson, D. K.: The diagnosis of cerebral syphilis, Rev. Neurol. and Psychiat., 9:241.

plained of dizziness and headaches. He refused to take more than five salvarsan treatments but there was some temporary improvement in his condition.

He was forty years old before psychotic manifestations appeared. He then became depressed, retarded and delusional. Anti-luctic treatment was resumed. A few months later he was admitted to a psychiatric hospital where he was resistive, depressed and had auditory and visual hallucinations. His speech was slurred, the left pupil was irregular and both reacted sluggishly to light and accommodation. Gait and station were unsteady and the knee jerks absent. Wassermann reaction was positive in the spinal fluid but negative in the blood. The spinal fluid examination also showed one cell, increased globulin and a colloidal gold curve of 2211000000.

He was given mercury inunction and intravenous salvarsan and after a month his mental condition began to improve. For several months however he was untidy, drooled and at times had to be spoonfed. He also clung to bizarre, hypochondriacal ideas, such as, "I can't talk—my throat is closed up—I have two heads and two necks—I don't look human—I'm nothing but a frame—my skull is empty." His memory for recent events was poor and at times he refused to speak, stared in a mirror and appeared confused. Occasionally he was semi-stuporous. Most of the time he was well oriented and realized that he needed treatment for an abnormal mental condition.

Two years after admission practically all of the psychotic manifestations had disappeared, there was no obvious impairment of memory, he was pleasantly argumentative and he had regained sphincter control. The spinal fluid findings were unchanged except for a colloidal gold curve of 1115151011. He was then discharged as much improved with a diagnosis of psychosis with cerebral syphilis.

His improvement continued after leaving the hospital and he had been able to attend to his business for two years prior to the development of the present symptoms. A week before his readmission he suddenly felt faint, slumped in his chair but did not lose consciousness. It was found that he was paralyzed on his left side and that his speech was slurred. He was slightly overtalkative and there were occasional outbursts of crying but otherwise the mental examination was negative. The pupils reacted sluggishly to light and accommodation and there was evidence of flaceid paralysis of the left side in-

cluding the face. Blood and spinal fluid examinations were negative except for a four plus Kline diagnostic test of the spinal fluid. Three months later he left the hospital. Diagnosis: Left hemiplegia due to meningo-vascular syphilis with a recent lesion in the right internal capsule. With the aid of daily muscle training and massage he regained enough use of his leg to be able to get about with a cane. Three years later there was no change in his mental condition.

#### EPIDEMIC ENCEPHALITIS

This somewhat rare disease formerly called encephalitis lethargica or "sleeping sickness" was not described prior to 1916. It is due to an infection with a filterable virus which in turn causes congestion and perivascular infiltration in the brain with degenerative changes in both the white and gray matter especially in the midbrain and basal ganglia.

In the beginning of the illness there may be headache, irregular fever, marked feeling of weakness and disturbances of consciousness varying from drowsiness to coma. In addition there are localized pains which are often followed by twitching, spasm, weakness and paralysis of various muscle groups. The ocular and facial muscles are frequently affected and one of the most common of the early complaints is double vision.

During the acute phase there may be apathy, mild excitement, depression or confusion with hallucinations and delusions. Among the most common manifestations are delirious, stuporous conditions and sleep disturbances. Drowsiness, lethargy or stupor may continue throughout the day or the patient may be wakeful at night and somnolent during the day. From this drowsy state he may be easily aroused and may then be surprisingly alert. During delirious periods he is usually occupied with his habitual trend of thought and occupational activities.

When more alert the patient may be overtalkative, overactive, euphoric and may show tendencies to uncontrollable smiling and laughter. On the other hand while depressed he may have suicidal impulses and may make repeated suicidal attempts. Sometimes these patients present hysterical and hypochondriacal symptoms. The memory for the acute phase is imperfect and tends to be patchy but there is very little evidence of memory defect by the time the first quiescent period is reached. Laboratory tests of the spinal

fluid show increased globulin and cell count and occasional alterations of the colloidal gold curve, none of which are distinctive.<sup>33</sup>

The acute symptoms may be present for several weeks or months and then there may be a remission lasting for months or years. About fifty per cent of these patients appear to recover but there is a tendency to relapses and slowly progressive mental deterioration.

The post-encephalitic changes in the behavior of children are sometimes very striking. Previously well adjusted and well behaved children may become irritable, restless, boisterous, cruel, impudent and disobedient. They may become indifferent and negligent of their personal appearance or they may expose themselves in public, steal and destroy property and resent any form of discipline. They either run away from school or are unmanageable and at home they have temper tantrums and are generally antagonistic, screaming, cursing and striking at their parents.<sup>34</sup>

The sequelae in adults is not less serious and often takes the form of a parkinsonian syndrome with tremors, muscular rigidity, a mask-like face and the peculiar posture and gait of paralysis agitans. Loss of associated movements in walking is especially characteristic and most often one arm is observed to hang motionless instead of swinging rhythmically.

Closely associated with these and numerous other physical disorders are characteristic personality changes. At first glance it may appear that the patient is emotionally and intellectually deteriorated. He shows very little initiative, does not appear to be interested in his surroundings and may sit in one position for hours, perhaps drooling saliva, and without any change in his facial expression.

On more careful examination however it is usually found that he is well oriented, shows very little intellectual impairment and his

<sup>33</sup> Kirby, G. H. and Davis, T. K.: Psychiatric aspects of epidemic encephalitis, Arch. Neurol. and Psychiat., 5: 491.

Holman, L. B.: Epidemic encephalitis, Arch. Neurol. and Psychiat., 6:295. Sands, I. J.: The acute psychiatric type of epidemic encephalitis, Amer. Jour. Psychiat., 7:975.

Hendrick, I.: Encephalitis lethargica and the interpretation of mental disease, Amer. Jour. Psychiat., 7: 989.

Kasanin, J. and Petersen, J. N.: Psychosis as an early sign of epidemic encephalitis, Jour. Nerv. and Ment. Dis., 64: 352.

<sup>34</sup> Bond, E. D. and Partridge, G. E.: Post-encephalitic behavior in boys, Amer. J. Psychiat., 6:25.

remarks sometimes indicate considerable emotional reaction. He complains chiefly of lack of energy. It appears then that the entire personality is suffering from a rigidity analogous to that observed in his muscles. He thinks logically but cannot convert his thoughts into action because of the resistance to motion. He even cannot give objective expression to his feelings because his facial and other muscles no longer respond to the changes in his emotional life. He may live for years thus imprisoned by his own musculature, fortunately somewhat unconcerned about the passage of time.<sup>35</sup>

The treatment of epidemic encephalitis after it has reached a chronic stage has thus far been disappointing. Symptomatic improvement often follows the administration of large doses of hyoscine hydrobromide and beneficial effects have been claimed for vaccine and many other forms of treatment. After an encephalitic patient has become bedridden treatment beyond good nursing care seems futile.<sup>36</sup>

#### PSYCHOSES WITH BRAIN TUMOR

The symptoms of brain tumor vary considerably according to the location, size, malignancy and rapidity of growth of the tumor. As a rule when the growth is slow the symptoms are fewer and less acute. Tumors in some parts of the brain may reach a considerable size before symptoms are produced, while in other regions, such as in the motor and sensory areas, symptoms appear rather promptly. The most important factor in the production of symptoms is the increasing intracranial pressure. Psychic changes are most pronounced with frontal tumors while somnolence is characteristic of basal tumors. A growth in the temporal, parietal or occipital region is more often associated with aphasia, apraxia, agnosia and hallucinations.<sup>37</sup>

Practically all forms of tumors are found in the brain but over 40

<sup>25</sup> Bromberg, W.: Mental states in chronic encephalitis, Psychiat. Quarterly, 4: 537.

Bahr, M. A.: The parkinsonian syndrome due to chronic epidemic encephalitis (von Economo type), Jour. Nerv. and Ment. Dis., 82: 514.

Perkins, O. C.: Chronic encephalitis, N. Y. State Jour. Med., 36:255.

<sup>86</sup> Abramson, J. L. and Victor, G.: Influenza vaccine in the treatment of chronic encephalitis, Jour. Lab. and Clin. Med., 20: 1043.

<sup>37</sup> Baruk, H.: Les troubles mentaux dans les tumeurs cérébrales. Etude clinique, pathogénie, traitement. Paris, 1926.

per cent are gliomas and over 30 per cent are either pituitary tumors or meningiomas. Symptoms of brain tumor may also be produced by a gumma, a tuberculoma, an abscess or by a parasitic cyst.<sup>38</sup>

In a study<sup>39</sup> which I have made of 1,000 verified cases of brain tumor the following summary of the manifestations was made:

"In addition to the commonly observed phenomena such as headache, nausea, vomiting, vertigo, convulsive seizures and papilledema there are certain manifestations of brain tumor which are of special interest to the psychiatrist. These vary greatly according to the stage of the illness. Among them are periods of irritability, restlessness and violence alternating with psychomotor retardation, confusion or somnolence; a succession of apparently neurotic complaints, apprehension, depression with suicidal impulses and finally euphoria or apathy; crude as well as highly elaborated hallucinations which are more often visual in type; a sequence of increased intracranial tension, retardation of psychomotor activity, attention and concentration difficulties, mild confusion, impairment of retention, defective recent memory and finally loss of remote memory; and associated with these changes are degrees of insight varying from a full realization of the illness to an euphoric blindness regarding an obviously grave condition.

"In the early stages of the illness the reactions are determined more by the type of personality affected but as the disease progresses the manifestations are increasingly those of organic disease of the brain. They are then dependent upon the location and rapidity of growth of the tumor as well as upon the degree of intracranial hypertension. Terminal organic dementia is the result of prolonged and high degrees of intracranial pressure as well as the neoplastic destruction of the brain.

"Intracranial hypertension is manifested by depression, anxiety, and physical distress, particularly referable to the head, alternating, with somnolence or euphoria or with disorientation, memory dis-

<sup>38</sup> Davidoff, L. M. and Ferraro, A.: Intracranial tumors among mental patients, Amer. J. Psychiat., 8: 599.

Dowman, C. E. and Smith, W. A.: Intraeranial tumors, Arch. Neurol. and Psychiat., 20: 1312.

Dixon, H. B. F. and Smithers, D. W.: Cysticercosis (Taenia solium), Jour. Royal Army Med. Corps, April-August, 1935.

<sup>39</sup> Henry, G. W.: Mental phenomena observed in cases of brain tumor, Amer. Jour. Psychiat., 12: 415.

orders and lack of insight. It would seem as though nature had provided a means of escape from intolerable suffering through a state of euphoria, somnolence or a disordered sensorium. Memory disorders and loss of insight were found to be dependent in large part upon the capacity to maintain contact with reality.

"The phenomena more often observed by the psychiatrist which have considerable localizing value may be grouped according to the site of the tumor as follows:

"Frontal Tumors.—Psychotic reactions common and most closely resemble the functional psychoses. Symptoms often suggest general paresis or, later in the illness, the advanced stages of organic dementia. Euphoria in marked contrast to actual condition; silly clownish pranks and pointless, crude joking; loss of former social, vocational and moral standards of living; and gross memory disorders with confabulation. In later stages incontinence of urine and faeces more common than with tumors in any other region. This incontinence is due to attention defects and apathy. A perseverated grasping reflex is occasionally observed. Grinding of the teeth especially during sleep is rather characteristic. Hallucinations of the auditory type more common than of the visual type. Various kinds of aphasia with tumors situated contralateral to the hand most freely used. Cranial nerves not involved except through intracranial hypertension.<sup>40</sup>

"These manifestations often appear before there are any neurological signs or even before the usual signs of intracranial hypertension are present. On the other hand in some cases there is little indication of tumor until the disease is well advanced.

"Temporal Tumors.—Very unpleasant olfactory and gustatory hallucinations often preceding epileptiform attacks or their equivalent dream-like states. Highly organized visual and auditory hallucinations, the visual hallucinations being much more frequent. Apraxia chiefly with tumors of left side.

"Parietal Tumors.—A kind of astereognosis in which the patient not only is unable to recognize the shape and nature of familiar objects with the hand contralateral to the lesion but he also retains no memory of their size, shape or form. Aphasia and apraxia with tumors situated contralateral to the hand most freely used.

<sup>40</sup> Ackerly, S.: Instinctive, emotional and mental changes following prefrontal lobe extirpation, Amer. Jour. Psychiat., 92:717.

"Occipital Tumors.—Crude visual and auditory hallucinations. Blindness without insight is not uncommon. Careful examination may disclose a succession of homonymous hemiachromatopsia, hemianopsia and visual hallucinations in the defective field and therefore referable to the side opposite to that of the tumor. This may be observed also in temporal tumors.

"Cerebellar Tumors.—A drunken, staggering or reeling gait with a tendency to fall toward the side of the lesion. Mental disturbances appear relatively late, usually after neurological signs have been observed. These disturbances are dependent upon prolonged and high degrees of intracranial hypertension. On account of the late development of mental symptoms the patient is harassed for a longer period with the growing realization of the actual condition than is the case with anterior cerebral tumors.

"Corpus Callosum Tumors.—Manifestations often resemble those of frontal tumors but there also may be temporal or parietal symptoms.

"Basal Tumors.—Manifestations in the form of somnolence, disorientation, memory disturbances or stupor appear early and continue most prominent. Tumors of the third ventricle and of the basal ganglia give rise to choreoathetoid movements, rigidity, tremors, tonic and clonic convulsions, hemiparesis and involuntary laughing and crying. Occasionally the cries and howling of animals in distress are observed. The clinical picture often closely resembles catatonia, paralysis agitans or a post-encephalitic parkinsonian syndrome. As a rule the patient tends to be immobilized, has a mask-like face, drools saliva, maintains a stooped position and sometimes has a propulsive gait. When overactive he is likely to be irritable and impulsively aggressive. If the pituitary gland is involved there are of course the usual manifestations of dyspituitarism.

"Ponto-Medullary Tumors.—Crude tactile hallucinations. As a rule the early symptoms of tumors in this region are referable to single cranial nerves and there is a long interval before other symptoms appear. Mental disturbances are due almost entirely to intracranial hypertension.

"Supratentorial Tumors.—A tendency to move the head backwards has been observed. This retracted position apparently facilitates the flow of the ventricular fluid out of the third ventricle.

"Subtentorial Tumors.—A tendency to keep the head bent forward is commonly observed. This flexed position facilitates the communication with the fourth ventricle but tumors in the posterior cranial fossa which grow towards the aqueduct sometimes cause retraction of the head. In many cases of unilateral cerebellar and extra-cerebellar tumors the head is slightly flexed to the side of the lesion and the chin is directed towards the opposite shoulder.

"Much of the difficulty encountered in trying to arrive at the diagnosis and localization of a brain tumor arises from the fact that by the time the patient comes under observation the disease is already well advanced. There is little opportunity to observe the sequence of events especially in those cases in which the early symptoms are regarded as merely functional in origin. As a result the earlier manifestations which have greater localizing value have become over-shadowed by the more general symptoms of intracranial hypertension.

"When this radical change in brain physiology has taken place frontal lobe symptoms may be obtained solely from the effects of the intracranial hypertension associated with basal tumors. Sometimes a tumor in a frontal lobe either by its location or its size may give rise to symptoms of a basal tumor through pressure upon the basal ganglia. At times the whole brain is displaced by a large neoplasm and the symptoms may be referable to regions where the pressure is greatest.

"In spite of the manifold variations in the clinical picture due to the type of personality affected, the location and rapidity of growth of the tumor as well as to the complications which arise through the influence of intracranial hypertension, a study of a large number of cases gives data upon which certain general conclusions may be drawn. Some of these may be stated briefly in the following manner:

"Neoplasms in the brain according to their location give rise to mental phenomena by which the evolution of the cephalic portion of the nervous system may be traced. In the ponto-medullary region mental phenomena are absent except for the late effects of intracranial hypertension. At times there is a disturbance of tactile sensibility, *i.e.*, with one of the most primitive means of contact with the external world. This disturbance is manifested by the appearance of tactile hallucinations.

"Neoplasms affecting the base of the brain are manifested by

disturbances in growth as well as by peculiar and exquisite pain reactions. They give rise to automatic laughing and crying and to crude motor phenomena in the form of rigidity, tremor, choreoathetoid movements, assumption of fixed postures, somnolence, stupor, inability to react to the presence of food in the mouth, drooling, automatic resistiveness, mutism and in general to the manifestations of parkinsonism or catatonia. Occasionally the howling or other cries reminiscent of a lower mammalian stage in evolution are observed.

"Cerebellar neoplasms give rise to disorders in locomotion and the maintenance of posture and to distant pressure effects. The associated mental phenomena are about as crude as those of the pontomedullary region.

"The crude visual illusory and hallucinatory phenomena observed with lesions in the occipital lobes may be elicited directly through the growth of neoplasms or indirectly through increase of subtentorial pressure. These phenomena are less commonly observed because tumors of the occipital lobes are much less frequent.

"As the frontal lobes are approached the mental phenomena observed are increasingly complex and highly elaborated. Neoplasms in the region of the fissure of Rolando disturb functions peculiar to human beings, such as reading, writing and speech.

"On the other hand, lesions in the temporosphenoidal lobes, *i.e.*, those affecting the archipallium, give rise to gross gustatory and olfactory disorders. In other words the response is a disturbance of primitive functions and of those senses upon which lower animals depend in their external contacts.

"Neoplasms of the temporal lobes may be accompanied by both auditory and visual hallucinations. These are usually highly organized and resemble the visions and voices characteristic of the functional psychoses. In general it appears that lesions of the temporal lobes are prone to give rise to hallucinatory phenomena.

"Thus far in the progression towards the frontal region visual hallucinations have been more common. When the frontal lobes are affected however, highly organized auditory hallucinations are more frequently observed. In this respect there is a closer approximation to the psychogenic psychoses.

"Neoplasms in the frontal lobes also produce gross personality changes and loss of the refinements in social contact which are

characteristic of most highly civilized people. Destructive lesions cause a prompt regression to the mode of living characteristic of intracranial hypertension but when this is the sole factor the mental phenomena tend to fluctuate with the variations in intracranial pressure."

Another study<sup>41</sup> of the manifestations of brain tumor in psychotic patients led to the following observations:

"It is noteworthy that every psychotic patient has his own individual peculiarities and that any complicating physical disease produces radical changes in the clinical picture. The patient then begins to behave and talk in a more normal way at least as long as the complicating disease forces itself upon his attention. He interrupts his psychotic behavior and talk to make known that he is not feeling well, that he has a headache, that he suffers vertigo or that he is in some other way in distress. As a rule these complaints are not associated with or supported by psychotic trends. In other words there is a marked contrast between the new symptoms and those characteristic of the uncomplicated psychosis. In addition there may be radical changes in the behavior or in the general condition of the patient including the appearance of neurological changes. If the clinical picture of brain tumor manifestations superimposed upon a psychosis were to be described briefly it might be said that it was characterized by changing contrasts and incongruities in the symptoms and signs and by evidence of organic disease of the brain which becomes increasingly obvious.

"Periods of blind, impulsive excitement, frenzy and violence with unaccountable irritability, may be followed by or alternate with periods of generalized retardation, mental dullness, somnolence or stupor. There often are lucid intervals or at least periods during which the patient returns to his former psychotic state. The somnolence may be dissipated by repeated questions or other stimuli, only to return when the patient is free to follow his own inclinations. Carelessness in personal appearance and incontinence make known increasing apathy.

"The patient's talk is consistent with other forms of psychomotor activity. When aggressive and talkative he is more often unpleasant and abusive in language. At other times he may have great difficulty

<sup>41</sup> Jameison, G. R., and Henry, G. W.: Mental aspects of brain tumors in psychotic patients, Jour. Nerv. and Ment. Dis., 78: 333.

elaborating and expressing his thoughts and he may even become mute. These wide variations in the degree of psychomotor activity may take place within a short period of time and are in striking contrast with the former clinical picture.

"The mood of the patient is usually consistent with the seriousness of the illness or the degree of suffering. More than half of the patients are depressed and a larger percentage are distinctly apprehensive. Euphoria is uncommon and its presence is always in striking contrast to the actual situation. At least one-fourth of the patients were suicidal.

"Disorientation or confusion was common, especially when the tumors involved the frontal, parietal or temporal lobes. It is rather characteristic that the amount of confusion fluctuates, and apparently according to the degree of increased intracranial pressure.

"Memory and retention disorders are most directly related to the amount of confusion present. As a general rule the more complex intellectual processes suffer first and there are times when memory and retention are almost completely lost. Recent memory is usually more seriously affected and not uncommonly fabrications can be elicited.

"At least one-fourth of the patients had some insight into the fact that a serious complication had arisen in the illness or that mental functions had been altered. Their own spontaneous complaints should have aroused the curiosity of the physician and furnished valuable clues as to the nature of the complicating disease. Through a change in symptoms these patients gave from a few months to several years warning of the presence of organic brain disease and when the peculiar variations in the clinical picture are considered it would seem that brain tumor should have been included among the possibilities."

The prognosis in cases of brain tumor depends upon the size, location, malignancy and operability. It is obvious that the sooner the diagnosis is made the more favorable is the outlook. The nurse and the physician may render invaluable assistance in arriving at the diagnosis and localization of the tumor by making careful note of the symptoms as well as the order in which they develop. This is especially true of convulsive seizures since the part which first begins to twitch may indicate the position of the tumor.

### PSYCHOSES WITH HUNTINGTON'S CHOREA

This is a rare disease which is probably inherited.<sup>42</sup> Bilateral lesions in the corpus striatum and in the cerebral hemispheres<sup>43</sup> probably account for the symptoms. Choreiform movements usually first appear between the ages of thirty and forty. Restlessness, grimacing and gesticulation are frequently observed. The more common mental symptoms are dullness, silliness, irritability, excitability, suspiciousness and forgetfulness, especially for recent events. Mental deterioration gradually progresses until a condition of childishness or apathy is reached.

In some cases the patient is helpless in the terminal stage of the illness and the choreiform movements may seriously interfere with all voluntary movements. Spasmodic contractions of the muscles involved in articulation may make vocal utterances unintelligible. In other cases the manifestations are so mild that a correct diagnosis is not made.

Symptoms of moderate severity were presented by a newspaper writer who was sixty-six years old on admission. His father and one sister developed choreiform movements after middle age. His illness was already of seven years duration and had begun with twitching of the right foot. Within a year the twitching had extended to the left side and gradually involved the whole body. He had noticed that his condition was gradually getting worse and that the choreiform movements were accentuated when he was irritated.

On admission he took the initiative in telling humorous stories but it was soon observed that he tired easily and was exceedingly sensitive, irritable and mildly depressed. He was discouraged with the course of his illness but hopeful that something might be done to arrest its progress. His remote memory was unimpaired except that he was hazy about dates. He refused to coöperate in tests of precision.

Soon after admission he began to complain that he was being confined and that the nurses were tormenting him and stealing his

<sup>&</sup>lt;sup>42</sup> Vessie, P. R.: On the transmission of Huntington's chorea for 300 years—The Bures family group, Jour. Nerv. and Ment. Dis., 76: 553.

Stone, C. S.: Huntington's chorea. A sociological and genealogical study of a new family, Mental Hygiene, 15:350.

<sup>&</sup>lt;sup>43</sup> Dunlap, C. B.: Pathologic changes in Huntington's chorea, Arch. Neurol. and Psychiat., 18: 867.

property. He said he was going to buy a gun and shoot them and he deliberately tried to annoy the nurses by urinating on the floor.

Within two years he was practically confined to bed because of his gross choreiform movements. He couldn't smoke because he would involuntarily set fire to his clothing. Food and other objects were knocked or dropped on the floor. He not only objected to assistance but protested violently that he was being abused by nurses and physicians. Although his writing was almost illegible he made note of various requests and then complained bitterly that no one paid any attention to him. Often his list of requests would be found on his table and it was evident that he had forgotten to give it to anyone. On account of this imagined neglect he retaliated by keeping his room in disorder, soiling himself and on a few occasions he secreted a knife with the intention of attacking someone. His memory failed and dementia became more and more evident until his death three years after admission.

#### PSYCHOSES WITH OTHER BRAIN OR NERVOUS DISEASES

Mental symptoms may accompany a number of other brain or nervous diseases. The most common of these symptoms will be mentioned briefly.

Paralysis agitans. Usually a reactive depression followed by a mild degree of mental deterioration.

Multiple sclerosis. Periods of excitement and confusion, tendencies to laugh and cry very easily and mild degrees of mental deterioration. The euphoria and optimism of these patients is grossly inconsistent with the profound disabilities with which they suffer.

Occasionally delusions, auditory hallucinations, depression, suicidal thoughts and attempts are observed. The acute mental symptoms change as the disease advances and are replaced by the manifestations of progressive mental deterioration.<sup>44</sup> The emotional lability appears to be a direct result of the invasion of the palaeon-thalamus by the morbid process.<sup>45</sup>

Acute chorea. Irritability, fretfulness, emotional outbreaks, for-

<sup>&</sup>lt;sup>44</sup> Brown, S. and Davis, T. K.: The mental symptoms of multiple sclerosis, Arch. Neurol. and Psychiat., 7:629.

<sup>&</sup>lt;sup>45</sup> Cottrell, S. S. and Wilson, S. A. K.: The affective symptomatology of disseminated sclerosis, Jour. Neurol. and Psychopath., 7: 1.

getfulness, confusion, often suspiciousness and paranoid ideas, sometimes stupor or delirium with hallucinations, and occasionally some mental deterioration.

Meningitis. Many essentially physical symptoms, abnormal sensitiveness, particularly to light and noises, delirium, convulsions and disturbances of consciousness varying from drowsiness to coma.

Amyotrophic lateral sclerosis. The mental symptoms which occasionally are associated with this disease may simulate any of the functional psychoses. In some of these cases euphoria, memory and judgment defects and other indications of organic dementia in the later part of the disease.<sup>46</sup>

Pellagra. About seven per cent of the patients suffering from this disease develop psychoses. In the early stages of this complication there may be mild depression or apathy which is followed by loss of memory, confusion, hallucinations, morbid impulses and delusions. There may be an apparent emotional exaltation which is obscured by a dreamy, confused state. In acute cases there may be a temperature ranging from 99 to 104 degrees and a low, muttering delirium with visual and auditory hallucinations. When the acute manifestations subside the mental symptoms are those of a progressive mental deterioration. In some respects this psychosis resembles general paresis.<sup>47</sup>

<sup>&</sup>lt;sup>46</sup> Wechsler, I. S. and Davison, C.: Amyotrophic lateral sclerosis with mental symptoms, Arch. Neurol. and Psychiat., 27:859.

<sup>&</sup>lt;sup>47</sup> Cooper, T. C.: Pellagrous insanity, Amer. Jour. Psychiat., 7: 945.

Wright, W. W.: Review of the history of pellagra with the report of a case, N. Y. State Hospital Bull., 7:471.

## CHAPTER X

### CONSTITUTIONAL DEFICIENCY

Definition. Constitutional deficiency is a general descriptive term applied to those physical, intellectual, instinctive and emotional defects which are inherited, congenital or acquired very early in life. In addition to and associated with these defects there may be psychotic or psychoneurotic tendencies or episodes.

Frequency. It is very difficult to arrive at an estimate of the frequency of these defects but it may be said that in some degree they are present in a large proportion of all people. These defects usually become evident before the age of maturity and are found with equal frequency in both sexes.

Causes. In the majority of cases the etiological factors are complex. Some common inherited factors are the tendencies toward psychoses, psychoneuroses, feeble-mindedness, epilepsy, moral deficiencies, sexual perversions, criminal and otherwise asocial personalities. Inherited tendencies toward physical disease are suggested by the relative frequency of certain illnesses in the family. The more common congenital factors are physical disease of the mother, premature birth, difficult and prolonged parturition and injuries at birth. Some of the factors operating in early life are malnutrition, deficient thyroid secretion, accidents and physical diseases, especially those affecting the nervous system. Many instinctive and emotional deficiencies are the result of early environment. Physical and intellectual defects may predispose an individual to instinctive and emotional maladjustment.

Symptoms. The manifestations of constitutional deficiency will be discussed in detail according to their relative psychiatric importance.

### PHYSICAL DEFECTS

Mere mention here of common physical defects will be sufficient. The brain may be abnormally large or small or defective either in

part or as a whole. The abnormalities may be due to defective development, injury, tumor, infection or vascular accidents, such as cerebral hemorrhage, or to interference with the circulation of cerebrospinal fluid such as occurs in hydrocephalus. Associated with these abnormalities are weaknesses and paralyses of various parts of the body as well as varying degrees of intellectual defect. The spinal cord likewise may be affected with resulting weaknesses or paralyses. There may be gross physical defects in the development of eves. ears, nose, mouth, arms, hands, legs, feet, rectum, anus and external urogenital organs. Minor physical defects sometimes referred to as stigmata of defective development include abnormalities of the cranium, malformations of the external ears, eyes, nose or mouth (abnormal spacing, position, or defective development of teeth; high-arched palate, harelip or cleft palate), webbing of fingers or toes, distorted or supernumerary digits, excessive amount or absence of hair, undescended testicles and infantile uterus. Physiological defects are commonly associated with malfunction of the ductless glands. Defects at the physiological level include such diverse conditions as clumsiness of bodily movements or poor muscular coördination and predispositions to affections of the respiratory, digestive, circulatory and other functional groups of organs.

These physical and physiological defects are important not only in themselves but also because they may give rise to morbid self-consciousness or a feeling of inferiority. The attempts to conceal or compensate for these defects often contribute much to the development of eccentric personalities.

# INTELLECTUAL DEFECTS (MENTAL DEFICIENCY) (HYPOPHRENIA)

Bodily defects not only complicate personality adjustment but they are also often associated with intellectual defects. Studies¹ have shown that bodily defects are most evident in persons of lowest intelligence and that as the intelligence level approximates the normal it is increasingly difficult to find bodily abnormalities. In other words intellectual deficiency is in most cases only one of the manifestations of arrested development.

<sup>&</sup>lt;sup>1</sup> Ashby, W. R. and Stewart, R. M.: Size in mental deficiency, Jour. Neurol. and Psychopath., 13: 303.

The causes of this arrested development are manifold. In a large proportion of the cases heredity seems to be an important factor but trauma of the brain at birth or early in life is also an important factor.<sup>2</sup> In general it may be assumed that any influence which has a detrimental effect on the germ plasm or upon the growing organism may be a factor in arrested or distorted development.<sup>3</sup>

Only the essential characteristics of intellectual deficiencies will be mentioned. According to the degree of intellectual development individuals have been divided as follows:

*Idiots*: Those whose development never exceeds that of a normal child of about two years.

*Imbeciles:* Those whose intelligence exceeds that of idiots but does not exceed that of a normal child of about seven years.

Morons: Those whose intelligence exceeds that of imbeciles, but does not exceed that of a normal child of about twelve years.

Feeble-minded: A general classification including the above three classes.

Subnormal or inferior adults: Those whose intelligence exceeds that of morons but does not exceed that of a normal individual of about fourteen years.

Normal or average adults: Those whose intelligence exceeds that of inferior adults but does not exceed that of a normal individual of about sixteen years of age.

Superior adults: Those whose intelligence exceeds that of the average adult.

A number of methods of testing have been employed to determine the various levels of intellectual development. There are also many tests for each age or intellectual level but only one test for each age will be given as an example.

<sup>2</sup> Doll, E. A.: Birth lesion as a category of mental deficiency, Amer. Jour. Orthopsychiat., 3:1.

Winkelman, N. W.: Cerebral trauma and its relation to mental deficiency, Amer. Jour. Psychiat., 10: 611.

<sup>3</sup> Rosanoff, A. J. and Inman-Kane, C. V.: Relation of premature birth and under-weight condition at birth to mental deficiency, Amer. Jour. Psychiat., 13:829.

Bagley, C., Jr.: Cerebral lesions, postmortem, in mentally defective children, Amer. Jour. Surg., 28:282.

Myerson, A.: Nature of feeble-mindedness, Amer. Jour. Psychiat., 12: 1205.

Mental Age Example of Test Used

One to two years. Candy is chosen instead of block.

Three years. Touches nose, eyes, mouth and pictures of these, as

directed.

Four years. Repeats three numerals in order when heard once.

Five years. Repeats "His name is John. He is a very good boy" and

similar sentences.

Six years. Knows whether it is forenoon or afternoon.

Seven years. Draws diamond shape from copy so that it can be recog-

nized.

Eight years. Counts from 20 to 1 in twenty seconds with not more than

one error.

Nine years. Within fifteen seconds names the months in order allow-

ing one omission or inversion.

Ten years. Repeats six numerals when heard once.

Eleven years. Names three words that rhyme with obey on one minute. Twelve years. Defines charity, justice, goodness, two satisfactorily. Fourteen years. Imagines hands of clock interchanged at 6:22, 8:10 and

Imagines hands of clock interchanged at 6:22, 8:10 and 2:46, telling the time correctly in two out of three, two

minutes being allowed for each.

Sixteen years. Repeats six numerals backwards or in the inverse order

given when heard once.

Eighteen years. Solves in five minutes two of three ingenuity tests, the

most simple of which is as follows: "A mother sent her boy to the river and told him to bring back exactly 7 pints of water. She gave him a 3 pint vessel and a 5 pint vessel. Show me how the boy can measure out exactly 7 pints of water, using nothing but these two measures and not guessing at the amount. You should begin by filling the 5 pint vessel. Remember, you have a 3 pint vessel and a 5 pint vessel, and you

must bring back exactly 7 pints."

Such tests have been criticized by individuals who are uninformed of the purpose of the tests or who have been misled by the results of these tests as applied by inexperienced examiners. It should be remembered that the tests measure only the person's general intellectual capacities and are not intended to be a measure of his usefulness to society. As a rule, after the age of sixteen the average person gradually neglects the major portion of general intellectual interests in order to specialize. To the extent to which this takes place the general intellectual capacities become limited. Furthermore, a person may have a high grade of intelligence but at the same time have criminal tendencies, delusions or other characteristics which

limit his usefulness to society. The examiner must have thorough training and practical experience in giving the tests before the results can be considered reliable. An inexperienced examiner commonly makes the mistake of trying to estimate the intelligence of a person who is emotionally disturbed. Attempts are even made to estimate the intelligence of a patient suffering from a psychosis which definitely interferes with intellectual processes.

The classification of mentally deficient persons according to intelligence level has great practical value but it is based upon a quantitative estimate which does not take into consideration the cause and nature of the intellectual deficiency. When attention is directed to these aspects a radically different classification of the mentally deficient is possible.<sup>4</sup>

According to this classification one group is composed of individuals who are constitutionally or psychobiologically inferior. It includes those with congenital diplegia, microcephalus, exycephalus (abnormally high, narrow skull), the mongolian idiots and imbeciles, the cretins and those with a form of dyspituitarism (dystrophia adiposo-genitalis). The last of these or the hypophyseal type is characterized by genital hypoplasia and by excess fat in the breasts, shoulders and lower abdomen. Cretinism, due to thyroid deficiency, is characterized by short stature, broad and flat nose, thick lips, protuberant abdomen, dry skin and hair, and by abnormally retarded mental and physical development which can be relieved by thyroid treatment. The mongolian type is characterized by a rounded skull, oblique and narrow palpebral fissures, depressed nasal bridge, transversely fissured tongue, stubby hands, paddle-shaped feet and hyperextensible joints. At present there is no specific treatment for the constitutionally deficient except for those whose deficiency is due to endocrine dysfunction.

A second group of the mentally deficient includes those whose intellectual defect is due to encephalitis, chiefly epidemic or syphilitic, to head injuries, at birth or in early childhood, and to inflammatory conditions resulting in hydrocephalus. Some of the mental deficiency in this group is preventable and the syphilitic type requires specific treatment.

A third group is composed of cases in which mental deficiency

<sup>4</sup> Potter, H. W.: A clinical classification of mental deficiency, Psychiat. Quart., 4: 567.

results from degenerative processes in the brain, particularly sclerosis of the nervous system<sup>5</sup> and amaurotic degeneration. In both of these conditions the outcome is fatal and the treatment is purely symptomatic. Two or more children in the same family may be affected with the amaurotic type which is characterized by progressive paralysis, increasing mental deficiency and loss of vision until there is complete blindness. This disease is confined almost entirely to Jews. Symptoms appear in infancy or in childhood and the illness is terminated by death within two years after the onset of symptoms.

Not uncommonly intellectually deficient individuals develop psychoses. These complications are manifested chiefly in the form of episodes of excitement with irritability and paranoid trends or of depression with confusion and hallucinations. As a rule, the more nearly normal the intelligence level is, the more closely do the psychoses resemble those commonly found in persons of normal intelligence. Conversely, the greater the intellectual defect the more likely it is that the psychoses will be modified by the interests, talk and behavior characteristic of the feeble-minded.

A psychosis in an intellectually deficient person is exemplified by the following clinical picture. The patient was a male, eighteen years of age at the time of admission. His physical development had been normal but intellectually he had not progressed beyond the age of seven. It had been necessary to care for him as though he was a child although he occasionally assisted in performing simple tasks. For some time before admission he had become more difficult to manage on account of an increasing tendency to be periodically quiet and morose and at other times to be excitable, restless and talkative in a childish manner. A member of his family stated that he would become "frightened and emotional like a child at the sight of a playful little dog." Shortly before admission he had become destructive, noisy and violent.

For a few months after admission he continued to have excited periods during which he was restless, constantly moved about and did everything "with a great whirl and a rush." He had a habit of collecting grass and sticks and carrying them around in his pockets. He expectorated upon and kicked those about him without provoca-

<sup>&</sup>lt;sup>5</sup> Ferraro, A. and Doolittle, G. J.: Tuberous sclerosis, Psychiat. Quart., 10: 365.

tion, talked rapidly in a childish, incoherent manner, destroyed his clothing and openly practised self abuse. The excited periods gradually became less marked and less frequent. Otherwise in over twenty years there was no marked change in his condition. He was taught simple occupations and was finally able to make baskets and cane chairs fairly well. When alone he was frequently seen laughing and talking to himself in a silly manner, repeating unintelligible phrases such as, "That! that! no means no." He was easily excited by any new situation or even by an attempt to engage him in conversation. For instance, when asked what year it was, he responded excitedly, "What year—no—that's right—what year." When asked how old he was, he said, "Forty-one years—I'm right—I'm right—that's right—that's right." He always ate in a great hurry, gulping down his food like a ravenous animal. He frequently wet and occasionally soiled himself.

Mental deficiency is a greater social problem than is mental disorder because most of the deficient live in the community. They are scarcely able to maintain themselves, they reproduce their own kind without restraint and they are easy victims of the unscrupulous. According to some estimates there are 6,000,000 feeble-minded persons in the United States<sup>6</sup> and only 60,000 of these are cared for in institutions.<sup>7</sup>

Fifty per cent of the mentally deficient belong to families in which the incidence of mental deficiency is so high that for practical purposes it may be assumed to be inherited. Attempts at sterilization or birth control in such cases lead to so many complications that the results are somewhat disappointing. If mental deficiency is inherited the genes which transmit it may be present in the germ plasm of all members of the family. Sterilization of the defective members is therefore only partially effective. It may be justified on the grounds that a mentally deficient person is unsuitable or incapable as a parent.

A solution through birth control is equally unpromising because only the most intelligent and responsible persons in the community are sufficiently interested and capable of using birth control measures

<sup>&</sup>lt;sup>6</sup> Popenoe, P.: Feeblemindedness today, Jour. Heredity, 21:421.

<sup>&</sup>lt;sup>7</sup> Brown, F. W.: A statistical survey of patients in hospitals for mental disease and institutions for feebleminded and epileptics in 32 countries, Proc. First Internat. Hosp. Cong., N. Y., 1932, Vol. 1, p. 777.

effectively.<sup>8</sup> It must be admitted, however, that it is very difficult to learn the facts in such controversial matters. Claims made for and against sterilization and birth control are likely to be a part of the propaganda of biased individuals. Some authorities even take the position that the feeble-minded are necessary in a community to perform menial tasks but with so much labor saving machinery there should be little need for human machines. In any case the wishes of the person involved demand serious consideration and whatever the virtues of sterilization or birth control may be each person should have the benefit of expert assistance in determining the number of children for which he or she should be responsible.

The problem of dealing with the mentally deficient in the community is urgent. Practically all members of this group have a mental age of ten or more and are privileged to enter into any contract available to the normal. Under ordinary circumstances they are able to maintain themselves but they are inevitably imposed upon. A large proportion of them transmit venereal disease or are the active agents in the commission of crime under the direction of more shrewd persons.

It is necessary therefore for every community to have psychiatrists and specially trained psychologists to ascertain mental deficiency in children at as early an age as possible and to make provision for special training of mentally defective children. Those who are incapable of adapting themselves to social life in the community or who have a detrimental influence on other children should be placed without delay in an institution for the mentally defective. Their chances of being trained to be useful are greatest in such an institution. Effective treatment of the mentally deficient requires continual education of the general public regarding the problems involved. The tendency in our modern civilization is to preserve the weak at the expense of the more fit and it may be necessary now and then to stimulate interest by calling attention to the dangers to the welfare

<sup>&</sup>lt;sup>8</sup> Baker, G.: The mental and social status of fifteen hundred patients in the obstetrical clinic of the Johns Hopkins Hospital, Johns Hopkins Hosp. Bull., 52:275.

<sup>&</sup>lt;sup>9</sup> Vaux, C. L.: New developments in the care and training of mental defectives, Psychiat. Quart., 7:672.

Lurie, L. A., et al.: A critical analysis of the progress of fifty-five feeble-minded children over a period of eight years, Amer. Jour. Orthopsychiat., 2:58.

of society which may result from an unchecked increase of mental deficiency.

#### INSTINCTIVE AND EMOTIONAL DEFICIENCY

These defects are found in a large group of individuals who are commonly referred to as having psychopathic personalities or as representing constitutional psychopathic inferiority. 10 Such individuals are in frequent conflict with social laws and customs because of uncontrollable impulses to satisfy cravings of the present, inability to profit by experiences of the past and lack of foresight. Many kinds and degrees of deficiency occur, some of which arouse universal condemnation while others are condoned by society. Many such deficient individuals begin to show their deficiencies early in life. Frequently there are delays in the eruptions of teeth and in learning to walk and talk. There may be also bed wetting, sleep walking, night terrors, tantrums, unusual attraction or aversion to members of the family, cruelty, timidity, untruthfulness, disregard of the rights of others, unusual dependence or self-assertion, inability to get along with other children and a tendency toward abnormal sexual interests and practices.

Those deficient persons who show asocial traits early in life are prone to develop asocial habits. These habits may eventually dominate their lives and may be continued even though there is little conscious gain or satisfaction. Stealing, for instance, may become so impulsive or automatic that it is impossible to resist regardless of consequences or the worthlessness of the stolen article. Likewise, lying may become so habitual that a person is untruthful even when truthfulness would be obviously advantageous. This is called pathological lying. 11 Some persons become so sensitive to discipline or to the presence of those who exercise authority that they are impelled to resist in order to maintain self esteem. Such persons may become criminals, anarchists or radicals of other types. On the other hand there are persons who continue the dependency of childhood and who are never able to assert themselves sufficiently to be independent and self-supporting, or to assume a position of responsibility. Many deficient persons continually indulge to excess in the sensual

<sup>&</sup>lt;sup>10</sup> Partridge, G. E.: Current conceptions of psychopathic personality, Amer. Jour. Psychiat., 10:53.

<sup>&</sup>lt;sup>11</sup> Wiersma, D.: On pathological lying, Character and Personality, 2:48.

pleasures associated with eating, drinking, drug addiction and the many forms of sexuality. A large group show their deficiency by the frequency and readiness with which psychotic or psychoneurotic episodes are precipitated by circumstances which would not affect a well adjusted person.

As a rule these deficiencies become increasingly obvious as a person approaches the age of maturity because more and more is expected of him. Some persons have been so sheltered that they do not show their deficiencies. Others succumb only when exposed to unusual stresses. Hence constitutional deficiencies are evident in proportion to the discrepancy between inherent ability and the demand for responsible conduct which social conditions impose.

As is the case with intellectual deficiencies, the more immature instinctively and emotionally a person is the less likely he is to develop a typical psychosis. In a very general sense the fact that a person develops a personality disorder suggests some deficiency of those balancing forces which even in times of unusual stress tend to stabilize the normal individual.

Illustrative cases. In order to illustrate instinctive and emotional deficiency the history of a boy of thirteen years old will be given in some detail.

The paternal side of the family was especially prone to independence. The father was unmanageable as a boy. The maternal side was inclined to be temperamental. Both sides were above the average in intelligence. There was nothing unusual about the patient's birth. He was a little slow in learning to talk, was always somewhat of a weakling physically and never took an active part in boys' games. As a child he was restless, excitable, easily frightened and very sensitive to noises. He continued to wet the bed and also soiled himself beyond the usual age. Although his parents were distressed by this and made special efforts to establish better habits the boy did not appear concerned. He started school at the age of six. He was solitary and could never get along with other boys. They called him "sissy." At home he was disobedient to his mother. At seven or eight he seemed impelled to play with matches. He liked to see them burn and he set a rug afire. In school he was constantly in difficulty. He was frequently absent or late and often played pranks such as dipping a girl's hair in ink. He was untruthful, killed chickens, stole and scuttled boats or set fire to them. He was sent to a private school but continued to lie and to steal. The father then told the boy that since he behaved like a delinquent he would be sent to a school for delinquents. This was done but the boy ran away repeatedly and continued to steal.

He was returned to the private school for a trial period. Within a short time he showed other undesirable traits, such as cowardice, cruelty in seeking revenge and intolerance for being placed at a disadvantage. A boy who had angered him had a pet rabbit. The patient sought revenge by cutting the ears off this rabbit with a knife. He also crushed to death three pigeons belonging to another boy who had angered him.

He was returned to the school for delinquents but soon ran away again. He was then taken to another private school where he circulated such obscene rhymes and vulgar gossip about sex relations that he was requested to leave. Another school for delinquent boys was tried but he ran away from here several times. After running away the last time he hid in the woods near his home for several days.

During the two or three years before admission his asocial tendencies became increasingly evident. He was careless of his appearance unless compelled to be neat and clean. He was exceedingly impertinent and disobedient to his mother and at times addressed her with oaths and vile language. At other times he gave vent to his feelings by spattering ink about or by kicking the plaster off the walls of his room. He was unduly interested in obscene rhymes and gossiped about juvenile sex relationships. He told boys how they might engage in sexual practices. He continued to steal money, stole the lights from a neighbor's automobile and shot out the street lights with an air gun. He burned a chicken coop, a boy's tent and a neighbor's barn, after having spread kerosene about them.

In spite of this gross misbehavior he respected his father and was well behaved in his presence. When talking about these things with his father he seemed very sorry at the time but he made no serious attempt to improve his ways.

He was poorly developed physically in that his muscles were flabby and he was awkward in the use of his body, particularly his fingers. These deficiencies along with his effeminate constitution made it difficult for him to compete in the virile activities of other boys. He was serious, egotistical, domineering, sensitive, irritable, quick tempered, resentful and inclined to have very strong likes and dislikes. He was attracted to older and intelligent people because his intellectual precocity obtained favor with them. On the other hand he was intolerant of those who were intellectually inferior to him. This attitude excluded him from the companionship of other boys. He was thus less often confronted by his own inadequacies and he enjoyed the false security of his own superiority.

He was continually restless and fidgety but he could concentrate on those studies which were of special interest to him. He was interested chiefly in chemistry, electricity and astronomy, concerning which he had an unusual fund of information. His intelligence level was considerably above that of the average child of his age.

Although his home environment was better than that of the average boy there are suggestions that the emotional relationship in the family may have contributed to some of his difficulties. He was the first child of a temperamental mother and of a father who was unmanageable as a boy and who was described as being independent, rigid and abrupt. He admired his father but disobeyed his mother. He was also jealous of a younger brother. It appears then that his striving for virility was manifested in a dominance over his mother and as an indirect protest against his father in the form of a morbid desire to violate authority and conventional behavior.

It is improbable, however, that he would have developed normally even under the most favorable circumstances. In other words, he represents a type of individual who is instinctively and emotionally defective, who is incapable of acquiring in accordance with social laws and customs the normal control over selfish interests and impulses and who is unable to appreciate or feel concern over the restrictions which society will gradually place upon him. Such a person is representative of what is commonly referred to as a psychopathic personality, or a constitutional psychopathic inferior.

In the case of a young man, twenty-one years old, with a similar record of misconduct environmental factors seem to have played a conspicuous rôle in his maladjustment. He had been a source of worry to his family since childhood and was finally admitted for a period of observation after an attempt to blackmail.

This patient had been handicapped through being a member of an extremely wealthy and prominent family, by an alcoholic father

whose chief interest was horse racing and by a worrisome, overindulgent mother who despised drinking. One maternal uncle was described as a "good-for-nothing and a drunkard." A brother has an uncontrollable temper when intoxicated and had been expelled from two colleges. His two sisters are poor students and one had recently been expelled from school for misconduct.

Early in childhood he began to manifest neurotic traits. He wet the bed until he was six, he picked at his nose and he remembers wearing some kind of handcuff to keep him from sucking his thumb. He stole things from guests and members of the family and he was notoriously untruthful.

His greatest source of anxiety was his father and it appears that much of his misconduct was an expression of rebellion against the father's discipline and abuse. His father swore at him, punished him by spanking or with a strap practically every day and with little provocation. Most of this abuse was a manifestation of the father's ungovernable temper while intoxicated and his violence was not confined to the patient. On two occasions the father tried to shoot the whole family.

At the age of seven the patient became an outcast after he accidentally shot his sister in the face with his father's rifle. Thereafter he associated more and more with servants who comforted him following his father's whippings. At the table he never said a word, kept his eyes fixed on his father and gave to a frequent visitor the impression of "fear personified."

In school he had difficulty from the beginning and his course was one of increasing failure. He got panicky over problems in arithmetic and made no attempt to solve them. He despised history. Any form of discipline made him rebellious and caused him to run away from school. Failure in his studies was especially painful to his father who was most anxious that he succeed in school.

As a child he was terribly afraid of the dark. He was too shy to play with other children and preferred to remain by himself. In church he used to faint toward the end of the kneeling period but this may have been due in part to the fact that he went to church without breakfast.

With the boy's increasing maladjustment the father drank more and more and resorted more frequently to corporal punishment. The patient says that he got in the habit of lying because he feared punishment and later because his father wouldn't believe him even when he did tell the truth. Finally when the boy was fourteen he was relieved by his father's sudden death. "I always hated him. After he died they used to make me pray for his soul but I would say to myself, 'g. d. his soul."

Two years after his father's death he acquired a domineering stepfather and rivalry over the mother's affection began. The boy felt that the step-father's chief interest in the family was financial. Attempts at discipline were futile because he could always get what he wanted from his mother.

His school training was increasingly irregular after his father died. He said he was troubled with stage fright and couldn't remember what he had learned when called upon to recite. Several different schools were tried but he either ran away or got into difficulty with the school authorities.

The problem of finding a place for him in society became acute in the last few years prior to his admission. Several times positions were obtained for him as a cadet on a boat but he regularly got into difficulty. On one occasion after he had reached a distant port he deserted the ship and cabled for money saying that he had been robbed. On another trip he again left the ship and his mother received a telegram from a chief of police stating that her son had been arrested for vagrancy. He apparently obtained pleasure out of concocting the stories which he related to his mother to explain his misadventures. He said he left one of the boats because a man had been shot and thrown overboard.

His mother continued to believe that he might go on with his education. She tried to get him interested in music but after two lessons he said it was too hard and stopped. At his own request he was admitted to a radio school but one session trying to learn a code was all he could stand. He then attended a private school for a few weeks. Without permission he drove to a neighboring city in the headmaster's car, collecting police signs as he drove along. When this misbehavior was reported to the family he threatened to beat up the master and he was then requested to leave the school.

On his own initiative he obtained a job as a clerk in a seaside hotel. He was soon in trouble through his association with a gang of bootleggers. Shortly afterward he obtained funds from his mother under the pretense that it was necessary for him to be a witness at a trial

of a friend in a distant part of the country. With his apparent interest in traveling he had no difficulty persuading his mother to finance a trip around the world. When he reached Panama he telegraphed that he was returning home because of a painful cyst on his hand. Later he admitted that his trip was interrupted because of gonorrhea.

In spite of their many disappointments the family were able to tolerate his behavior until he began to coach his favorite younger sister in misconduct most likely to lead to her expulsion from school. They were much distressed when he got her intoxicated and when she was actually expelled from school. Reprimands from the family were met with the announcement that he and his sister were going to leave home. To pay their expenses he attempted to cash a check for \$50.00 with no money in the bank to meet this check. He resorted to blackmail and was then admitted for observation to prevent further complications.

In the hospital no formal disorder was observed. At first he was boastful, arrogant, and at times threatening. He demanded to be released because he had to meet a fellow who was bringing news to him regarding his fiancée. He refused to participate in any of the activities except to play pool. He said he was ashamed of the things he had done and that his one fault was lack of ambition. Psychometric test showed an intelligence level of eighteen years.

As he became aware that his protests and threats were not taken seriously he began to be somewhat more coöperative. He boasted of his sexual prowess and of his ability to drink. He said he could drink a quart of gin in an hour and still keep on his feet and that women kept him because of his sexual vigor. As a child he said that a man had introduced him to sodomy but he denied homosexual interests. In preparatory school he beat up those who made homosexual advances but later on he did submit himself to men when he was in need of money. He said he had been in jail several times— "seven niggers and myself in one cell—not bad at all." He had never been homesick or lovesick but he guessed he was "too much of a thinker." He was a fatalist and he hated work—"I believe life is too short to fool around with things we don't like." He wanted to be an aviator but his mother would not permit this. Later he admitted that he didn't have courage enough to fly. He also admitted that he refused to go to the gymnasium because he could not tolerate being at a disadvantage. He would not engage in boxing or wrestling because of fear of personal injury.

After a month's observation he left against advice in care of his step-father. A diagnosis of psychopathic personality was made. The chances of a better adjustment seemed dubious because of his history and the attitude of his family. They were advised to place him in the care of a somewhat older male psychiatric nurse who would live and travel with him and who would gradually try to introduce socially desirable interests and activities.

Without a detailed psychiatric history it would be difficult to understand how a boy with superior intelligence<sup>12</sup> could be so deviated in his behavior. We know however that some persons with unusual native ability in a particular field attain some degree of excellence in spite of being poorly adjusted. They may become prominent as leaders in social affairs or distinguished in the field of science or art. Some add to our store of knowledge and many captivate us through emotional appeal. At all times we are subject to the influence of a few and in fact all history is a record of the dominance of a few leaders. We have been in the habit of looking upon them as different from ourselves, as geniuses or perhaps as superhuman.

Now and then we learn more about these people and we are surprised to find that their lives have been more difficult than our own and that their achievements are in part the result of a struggle because of a limited capacity to make the more usual adaptations of the average person. Their lives have been difficult not only because of strictly personal problems but through the inevitable conflict which arises between the unusual person and his more ordinary neighbors. Superior intelligence carries with it the risk of ostracism because of snobbishness; material wealth and power are opposed by envy and hatred; and even altruism carries with it the suspicion of a desire for personal gain. The genius is annoyed by what he terms the common herd and his more ordinary fellow citizens may be called upon to tolerate or even to forgive his transgressions of social conventions. We have also become lenient in our estimation

<sup>&</sup>lt;sup>12</sup> Dowd, C. E.: A study of high school graduates with reference to level of intelligence, Jour. Ed. Psychol., 23: 687.

Hollingworth, L. S.: The child of very superior intelligence as a special problem in social adjustment, Proc. First Internat. Cong. Ment. Hygiene, N. Y., 1932, Vol. 2, p. 47.

of the reformer for we now understand that in his attempts to change our ways of living he is really trying to solve his own problems. Sometimes we realize that if left to ourselves we proceed indefinitely at the level of mediocrity and we are grateful for the stimulus of those gifted but eccentric persons whom we regard as psychopathic.

Whether we are the fortunate heirs or the victims of these psychopaths it is not difficult to establish the fact that they are psychopathic. As a matter of fact it is difficult to find a person of superior abilities who is well adjusted. The extent to which there may be deviations is indicated by some details from the lives of three remarkable psychopaths—Rousseau, Ruskin and Napoleon.

Jean Jacques Rousseau has been generally acknowledged as one of the greatest writers of the eighteenth century. His influence was felt throughout Europe and especially in France where it contributed to the Revolution. His celebrated work on education is still highly valued. In spite of this his entire life is characterized by eccentricities.

He has been described as a slave to his emotions, a kind of vagabond who changed his name, country and religion, and a person who though consistently unsocial aimed to regulate society. He had a very high opinion of himself, indulged in much self pity and often took refuge in revery.

He says that as a child he was a glutton, a liar and that he had no scruples against stealing. Repeated spanking became associated with sexual pleasure and thereafter all sensual gratification contained elements of pain and shame. Even at the age of sixteen he exposed his buttocks in public in the hope that he might again enjoy his childhood pleasure. He was continually falling in love but the woman always made the advances. He felt most happy when held in her arms and treated as a child. He had already reached manhood before he became acquainted with the nature of adult sexuality and he then "believed it would require centuries to prepare for this terrible arrangement." He finally married a kitchen maid by whom he had five children. All of these he placed in an asylum for foundlings as "the act of a citizen and a father . . . worthy of a member of Plato's Republic." 13

John Ruskin, author, art critic and reformer, has left us de-

<sup>&</sup>lt;sup>13</sup> Demole, V.: Analyse psychiatrique des confessions de Jean Jacques Rousseau, Schweizer Arch. f. Neur. u. Psychiat., 2: 270.

scriptions of natural scenery which have been regarded as priceless gems of word-painting. During his life he directed attention to the need for a national system of education and for the establishment of old-age pensions. His absolute sincerity in preaching the gospel of social righteousness and service to others is indicated by the gift of a tenth of his possessions in order to establish a guild whose basic principles were "that food can only be got out of the ground and happiness out of honesty." For nine years he was professor of fine arts at Oxford.

All of this is in strange contrast to the more personal characteristics of his life. He was the only child of domineering, elderly parents who were determined to mould him according to their own notions and desires. His mother is described as a grim figure who could ride all day in a carriage without leaning against the back of the seat.

Beginning with his infancy he was whipped if he cried, if he was disobedient or did not keep quiet and even if he tumbled down the stairs. For a time playthings were considered sinful and he was not even permitted to play with other children lest they should lead him into mischief. In their garden was abundant fruit which he could look at or study but which he must not touch. On the rare occasions when they had visitors he was permitted to crack nuts for them but could not have any for himself. He was debarred from all forms of exercise except walking because boating was too dangerous, boxing too vulgar and it was not safe for him to be in the same field with a pony.

At the age of twelve riding lessons were attempted but he fell off so regularly that the expedient of a well-broken pony led about by the riding master was tried. This worked well except that he fell off at the turn of a corner. Finally his parents concluded that "his not being able to ride was a sign of his being a singular genius."

Until the age of ten his mother was his sole tutor and because of frequent illnesses he practically never went to school. Other boys treated him as they would a girl. His shyness and reticence caused him much pain and he was a desperately lonely individual. He said he had a "sense of sailing on a lonely sea."

His sheltered existence was such that even by the time he was fifteen he had scarcely left his parents for a day. When he went to Oxford his mother took lodgings near the college and required him to report to her daily and to go to bed early.

At twenty-nine on the advice of his mother he married a charming, vivacious girl ten years his junior, a girl in whom he was casually interested and who had been selected by his mother. They were joined on the wedding tour by his parents and after a few years of married life, interrupted by periodic flights to his mother, the marriage was annulled on the petition of his wife. This he accepted without objection. He never again ventured from the parental roof where he continued to live in "almost unendurable solitude."

In recalling his chief blessings and misfortunes he wrote: "I never had heard my father's or mother's voice once raised in any question with each other; nor seen an angry, or even slightly hurt or offended, glance in the eyes of either... I obeyed word or lifted finger, of father or mother, simply as a ship her helm... nothing was ever promised me that was not inflicted, and nothing ever told me that was not true."

He lived on in solitude with alternating periods of depression and exhilaration until he finally withdrew into a permanent psychotic state. Only once did he protest to his parents that they fed him effeminately and luxuriously but that they thwarted him in all earnest fire and passion of life. He gave expression to the tragic failure in his emotional life in his comment on the death of his father: "I never had any conception of the way I should have to mourn, not over what I lose now, but over what I have lost until now."<sup>14</sup>

Napoleon Bonaparte was the son of an indolent, unsuccessful lawyer possessing little strength of character and of a woman of lowly birth whose intelligence was of high order and who was intensely energetic and determined.

According to his own account the scenes of his early life were anything but peaceful. "I was born," he wrote, "when our country was perishing; the cries of the dying, the groans of the oppressed, the tears of despair were around my cradle from birth."

Even in childhood he was unable to adapt himself and always insisted upon having his own way. He was proud, serious, distant and unhappy. According to his own account he could never laugh

<sup>14</sup> Nelson, L. A.: Why John Ruskin never learned how to live, Mental Hygiene, 12: 673.

and be like other boys. At twenty-three he said that "too many cares spoil my life and influence my disposition. They make me solemn beyond my years." He was said to be taciturn, fond of solitude, capricious, haughty, full of self love and unbounded aspirations.

Early in his military career he expressed unlimited faith in himself as well as contempt for those in charge of the government whom he considered inferior. To his intended bride he said: "Do these people imagine that I want their help to rise? They will be glad some day to accept mine."

His inability to adapt himself to any career but that of military leadership is indicated by his reaction to being discharged from the army because of temporary change in the ruling political party. After fruitless attempts at reparation of the wrongs he believed he had suffered and with his dream of an oriental empire fading, in despair he started out one night to throw himself into the Seine. On his way he happened to meet an old friend who on hearing the story of his distress presented him with a bag of gold and dissuaded him from his suicidal purpose.

His later successes only served to stimulate a greater craving for self glorification. He must have triumphal arches to celebrate his victories. In his order for the Arc de Triomphe he seeks to outdo the Romans and specifies that "it must not merely equal, it must surpass the past."

Likewise when he is about to assume the imperial title he summons Pius VII to perform the ceremony of his coronation but lest he should acknowledge some power greater than his own he snatches the crown from the pontiff's hands and places it upon his own head. He had reached a point in his career at which he did not hesitate to refer to himself as a superman and he often said, "I am not as other men, I am a law unto myself."

In spite of these representations of himself as omnipotent and invincible he believed in presentiments and horoscopes, he sought and accepted the prophecies of any sorcerer, he was in despair when he broke a mirror, in terror of Friday and of the number 13 and he considered the letter M fatal. Moreover he suffered from habitual twitching of his right shoulder and his lips. He was subject to epileptic attacks one of which probably cost him his final defeat for during the most critical hours of the battle of Waterloo he was utterly incapable of issuing commands.

At times he represented himself as a hero of independence and a friend of the oppressed but there were many who regarded him as a traitor to democracy and a person who cloaked his own tyranny in the idealistic phraseology of the Revolution. Although he hastened the end of the old feudal aristocracy and in its place established a middle-class state with centralized administration, uniform law, a system of education and popular representation in national government, his insatiable craving for power and his ruthless struggle to make himself the head of a world empire even though at the cost of several hundred thousand lives have led many to agree with him that it would have been better for the world if he had never lived.

It is usually not difficult to find some explanation for the peculiar way in which such personalities develop. Rousseau was born a weakling and was not even expected to live. Even in childhood his imagination was stimulated to a pathological degree by his father with whom at the age of seven he sometimes spent whole nights in a fictitious world reading romantic stories. From this he says he gained "bizarre and romantic ideas of human life of which neither reflection nor experience have ever been able wholly to cure me."

At school he was cruelly punished because he was suspected of having broken a comb and refused to confess guilt since he was actually innocent of this offense. We have his own statement of the violence of his reaction to this experience as well as to any other form of injustice or cruelty; "This first sentiment of violence and injustice has remained so deeply engraved in my soul that all the ideas relating to it bring my first emotion back to me... When I read of the cruelties of some ferocious tyrant, or of the subtle atrocities of some villain of a priest, I would fain start on the instant to poniard such wretches, though I were to perish a hundred times for the deed."

With such an emotional attitude toward the world firmly established early in life along with the formation of a perverted habit of obtaining sexual gratification it is not surprising that he should continue to be eccentric. The pain which in early life was always a part of his most intense pleasure continued to be inflicted upon him by an unfriendly world which did not understand him and which he was continually offending. He says that with the injustice of his school days he "ceased to enjoy pure happiness" and in his more mature years even pleasure vanished. Life's painful experiences were then gradually interpreted as the result of the influence of a

hostile and aggressive environment; suspicions became delusions of persecution which distorted the latter part of his life.

The essentially effeminate constitution of Ruskin gave him little chance of emancipating himself from early emotional ties. What little initiative he may have shown in the direction of independence was so promptly and effectively crushed by his parents that his life and work stand as a monument to their ideals. It is doubtful whether they ever suspected the source of his unhappiness.

Napoleon's earliest associations were with poverty, conflict and a lowly social position. From youth he had but one goal in life which had its origin in profound feelings of insecurity and its attainment in omnipotence. The explosive nature of his character is consistent with epileptic disease. Had the time in which he lived been more peaceful there might not have been opportunity to give expression to his insatiable desire and he might have early in life chosen the alternative of suicide. <sup>15</sup>

The psychopathic group includes such a large number and variety of poorly adjusted persons that an adequate presentation cannot be undertaken in a book of this kind. Attention will be called to the types of individuals presenting anomalies in psychosexual development (p. 343) and comment will now be made on problems confronted in dealing with anti-social groups.

The evolution of our present conceptions regarding the delinquent and the criminal is essentially the same as that regarding the whole group of psychopaths. Moreover the methods suggested for the prevention and treatment of delinquency and crime have equal validity in the consideration of other forms of psychopathy.

There are still remnants of the medieval conception that crime is the handiwork of devils who must be expelled from the depraved person by various magic procedures and by some form of torture of the host. By the middle of the eighteenth century superstition and magic were supplanted in part by the philosophical assumption that each person is a free moral agent who is responsible for his acts and who should therefore be punished in accordance with the gravity of the crime committed. It was a simple matter then for legislatures to make a list of crimes and to prescribe for each of them the precise punishment which the judges might impose.

The administration of justice in accordance with criminal law be-

<sup>&</sup>lt;sup>15</sup> Clark, L. P.: The narcissism of Napoleon, Med. Jour. and Rec., 129: 440, 521.

came somewhat complicated a century ago when it was recognized that children, the feeble-minded and the obviously insane are not capable of exercising free will and that they are therefore not responsible for crimes which they may commit. Since that time there has been no important change in the theory or practice of criminal law.

Physicians became more directly involved in the problem in the latter half of the nineteenth century when Lombroso tried to show that criminals were destined from birth to commit anti-social acts. We have reached the other extreme of considering the criminal a product of his environment. Those who are best informed about criminals recognize multiple factors in their making and include heredity, constitution and early environmental stresses with their emotional readjustments, just as in any form of personality disorder.<sup>16</sup>

As far as can be judged from the frequency and from the quality of modern crimes very little progress has been made in dealing with this social problem under our present antiquated system of criminal law. More than 60 per cent of the graduates of correctional institutions are failures in the community.<sup>17</sup> Failures are due to the fact that the law pays no attention to the potential criminal. After he has committed a serious anti-social act he wins the distinction of being a delinquent or a criminal, according to his age. official struggle with society's disciplinarians then begins. Having once been convicted he is thereafter under suspicion. The police become aggressive, the district attorney is eager to establish a record of convictions and the lawyer who may be assigned to represent him often advises that he plead guilty in the hope of a suspended sentence or to dispose of the case as quickly as possible. A recent study of the records of prisoners at a large reformatory showed that coercion of authorities and bargaining with the district attorney resulted in a plea of guilty in 93 per cent of the cases. Many of these were indicted for a much greater offense than was committed and some were innocent of the charge.18

Such procedures are most likely to stimulate anti-social tendencies and make the delinquent or young prisoner an apt pupil of his more

<sup>&</sup>lt;sup>16</sup> Glueck, S.: Mental hygiene and crime, Psychoanalytic Rev., 19:23.

<sup>&</sup>lt;sup>17</sup> Shimberg, M. E. and Israelite, J.: A study of recidivists and first offenders of average and defective intelligence, Amer. Jour. Orthopsychiat., 3: 175.

<sup>&</sup>lt;sup>18</sup> McCartney, J. L.: An intensive psychiatric study of prisoners, Amer. Jour. Psychiat., 13: 1183.

experienced associates. Whatever his intentions may be on his release he soon finds that he is a social outcast. He is then tempted to emulate the most distinguished of his social class. If he is sufficiently shrewd and daring he may receive greater attention than a national hero. His life will at least be exciting even though it may be short. With political influence and under the guise of preserving his legal rights he may avoid punishment indefinitely.

As a last resort he may make a plea of insanity or that he is a victim of uncontrollable impulses, a psychopath. The trial then becomes a farce in which the expert witness swears to tell the truth and the whole truth. Actually the expert is compelled to answer the lawyers' questions which are so framed that he is always dealing with only part of the truth.

This highly unsatisfactory state of affairs is largely the result of trying to deal with the criminal according to the crime he has committed. For practical purposes little more is accomplished by this method than an interruption of a criminal career. The criminal himself should be studied and he should be dealt with according to his criminal potentialities. If he has already demonstrated that he is unlikely to be a desirable citizen there will be less uncertainty as to the action to be taken. If it is found that he is motivated by uncontrollable impulses to commit serious anti-social acts he is in need of study and treatment and he should be segregated from society as long as he continues to be a menace regardless of the gravity of the crime he may have committed. It should be the responsibility of the court, therefore, to determine whether or not a crime has been committed. The most suitable treatment of the situation then can be determined only by psychiatric investigation of the offender. With this additional information and the recommendations of the psychiatrist the court is in a position to outline a course of action which may safeguard the interests of the offender as well as those of society. Such a procedure is an application of the general principle that it is the psychopath himself who requires special attention rather than the offense he commits. In following this principle we deal with the sources of maladjustment rather than with the consequences.20

<sup>&</sup>lt;sup>19</sup> Healy, W.: Psychiatry and the juvenile delinquent, Amer. Jour. Psychiat., 91: 1311.

<sup>&</sup>lt;sup>20</sup> White, W. A.: The need for cooperation between the legal profession and the psychiatrist in dealing with the crime problem, Amer. Jour. Psychiat., 7: 493.

## CHAPTER XI

# METHOD AND PURPOSE OF MENTAL EXAMINATION

By the time the patient comes under observation the physician usually has some impression of the nature of the personality disorder with which he must deal. If he is unduly influenced by theoretical conceptions he is prone to seek those facts which give support to his theories and if he wishes to be strictly scientific in his work he may record a mass of details which obscure the understanding of the patient's life problem. The broader vision which sometimes comes with greater experience should lead to the adoption of an intermediate course in which all observations are as objective as possible but at the same time selected in each case according to the life pattern and the trends in the failing adjustment.

The recording of the family history¹ may become a tedious routine procedure unless there is a desire to ascertain the sources of the personality type of the patient as well as of his habitual modes of reaction to stress. In actual psychiatric practice it makes little difference whether or to what extent personality traits or tendencies may be inherited or acquired. Practically all individuals spend the formative period in their lives under the direct influence of their parents and other members of the immediate family and it is impossible to differentiate clearly what may have been contributed by inheritance, imitation or identification. Each generation repeats this intimate personal relationship and it is therefore necessary to study the personalities of the whole family and particularly of those members who have aroused in the patient strong feelings of attachment or dislike.

After the physician has studied the family background in this manner he already anticipates much that may be disclosed in the personal history. His interest is not at all confined to the simple facts of development, illness or accident but he must study the atmosphere in which these events took place. He must ascertain

<sup>&</sup>lt;sup>1</sup> For a detailed study of a family history see the author's Essentials of Psychopathology, Chap. I.

the reaction of the family to these events and he is especially interested in their effect upon the patient.

In all families the formation of strong emotional relationships is inevitable and the physician must determine what part the patient played and the extent to which old emotional ties have prevented him from establishing new relationships.

The patient began life with the gratification of purely selfish desires but the world into which he was born never ceased to make demands for self sacrifice. As a mature adult he is supposed to be able to give as much of himself as may be necessary for the next generation to repeat the cycle and finally he should be able to surrender himself with equanimity to the inevitable consequences of later years. Along with the dominant progressive strivings for the accomplishments and satisfactions of the future are equally strong desires to linger by the way or even to return to old and familiar scenes.

The physician wishes to know why the personality development was interrupted by illness. He finds that there have been pleasant memories inviting the patient to return to childhood or infancy when confronted with apparently insurmountable obstacles. Each change in the circle of friends and relatives may provoke regressive steps and the physician will study the influence it has exerted upon the patient and the manner in which he has striven to adapt himself to the new circumstances.

This general viewpoint and interest in the life pattern of the patient serve to coördinate the otherwise somewhat isolated events in the personal history and should arouse greater interest in the rôle played by physical endowment, illnesses, feelings of inferiority, the formation of habits, the critical periods in the sexual development and numerous other factors outlined in the guides for taking a personal history.<sup>2</sup>

From the general anamnesis an impression of the patient's intelectual capacities and habitual modes of reaction is obtained but it is desirable to have more specific information regarding these aspects of his personality. For this purpose there has been elaborated on the basis of clinical experience a guide for the study of the personality. Such topics as the general intelligence, knowledge and judgment, the output of energy, the attitude toward the environment,

<sup>&</sup>lt;sup>2</sup> Cheney, C. O.: Outlines for Psychiatric Examinations, N. Y. State Department of Mental Hygiene, Albany, N. Y., 1934.

Meyer, A.: Outlines of Examinations, White Plains, 1918.

the habitual emotional and instinctive reactions and the feeling of inferiority are investigated. Suggestion of qualities which the patient may possess is avoided by allowing the informants to give a detailed description of specific instances or situations which may illustrate the patient's tendencies.

This study reveals those personal tendencies and capacities which, in their adaptation to environmental influences, result in a series of events constituting the personal history of the patient. It provides a detailed account of the patient's personality before it became distorted by the illness.<sup>3</sup>

The illness may be looked upon as the culmination of a long struggle to maintain some degree of harmony between personal desires and social demands. Failure in adjustment may have been precipitated by some special stress which appears to be the cause of the illness.

As far as possible it is preferable to obtain a spontaneous account of the illness and detailed descriptions of its manifestations in the order of their development. The physician is an interested but noncommittal listener who now and then guides the informant by suggesting a new topic or by asking a specific question. In all psychiatric work an accurate account of what the patient actually did or said is much more valuable than a description of events in general terms. Events should be recorded in their chronological order and localized as far as possible by means of exact dates. Effort should be directed toward obtaining an account of what has actually transpired rather than trying to get data which permits the illness to be grouped with some classical type of disorder.

## MENTAL STATUS

Before the formal mental examination is undertaken thorough physical and neurological examinations of the patient are made. As these preliminary investigations are essentially the same as those made in the study of other kinds of illnesses further reference to them is unnecessary.

The art of quickly making contact with a patient and gaining his confidence is not a common possession. Only a few general sugges-

Amsden, G. S.: Revised edition, White Plains, 1924.

<sup>&</sup>lt;sup>3</sup> Hoch, A. and Amsden, G. S.: A guide to the descriptive study of the personality, Rev. Neurol. and Psychiat., 11: 577.

tions may be given regarding the technique of approach as much is dependent upon professional experience. The physician has the task of making inquiry regarding the patient's mental functions and regarding his personal affairs, subjects concerning which most people are rather sensitive. The patient may not recognize his illness or he may look upon it as the greatest tragedy which could befall him. As no two patients are just alike the physician must proceed cautiously and tactfully in accordance with the needs in the particular case.

As far as possible he should be an interested listener and he must consider facetious behavior, grandiose delusions, feelings of unreality or bizarre conduct with the same dignity and understanding that he would the symptoms of any other illness. At the same time his friendly attitude should invite a discussion of the patient's problems. Ridicule, command, deception and argument have no place in psychiatric technique. Promises should not be made unless they can be fulfilled and when there is uncertainty as to the wisdom of a positive statement it is better to be non-committal.

The mental status is part of a formal record of the patient's condition at the time he comes under observation. It is essential in determining the nature of the illness. In order to be complete certain topics must be investigated but experience and the patient's condition determine the depth to which any particular aspect should be probed. These topics in the order in which they are usually investigated are presented in the following synopsis of the mental examination:

- I. Attitude and General Behavior.
- II. Stream of Mental Activity.
- III. Emotional Reaction: Affect or Mood.
- IV. Mental Trend: Content of Thought.
- V. Sensorium, Mental Grasp and Capacity.
  - 1. Orientation.
  - 2. Data of Personal Identification: Remote Memory.
  - 3. Memory of Recent Past.
  - 4. Retention and Immediate Recall.
  - 5. Counting and Calculation.
  - 6. Reading.
  - 7. Writing.
  - 8. Thinking Capacity, Attention and Mental Tension.
  - 9. School and General Knowledge.
  - 10. Insight and Judgment.

After the patient has been examined in regard to these topics the report of the mental examination is concluded with a summary statement of the positive findings.

This examination should be made as soon as possible after admission since the patient's condition may change rapidly, especially under the stimulus of a new environment. The descriptions should be objective even though the special features noted may be determined by an understanding of personal conflicts manifested in the illness. Each step in the examination should be made in relation to previous responses and the manifestations which characterize the illness should be described in detail.

By his *attitude* the patient may indicate whether he is friendly, irritable, antagonistic, suspicious, aggressive, shrinking or indifferent. This will be shown by the postures he assumes as well as by his facial expression.

His general behavior discloses more clearly the type of disorder present and it lends itself readily to objective description. According to the commonly used phraseology the patient is described as being overactive, playful and facetious or underactive, deliberate and conservative. His behavior may be dramatic, compulsive, impulsive, negativistic or stereotyped. Many other general descriptive terms are employed but the record is much more valuable when characteristic behavior is described in non-technical language.

Observations of the stream of mental activity are best made as the patient gives a spontaneous account of his trouble and from expressions of his trend of thought. Verbatim samples of his talk are essential. They are more valuable as a part of a scienific record than mere descriptions of talk and behavior however accurate and detailed these may be.

Sometimes the patient may show a logical progression in the association of his ideas and he may answer questions promptly and relevantly. In such cases no disorder may be observed. More often the patient is over-productive in speech. His talk may be voluble, rambling or incoherent. Verbatim samples may show distractibility, flight of ideas and other peculiarities such as the invention of new words or phrases (neologisms). The increased urge for the expression of ideas and feelings results in a volubility of talk and writing which is the equivalent of a free association of ideas. By making careful note of the general trend and of some of the more

significant details information may be obtained regarding the patient's interests and conflicts which may not be disclosed at any other time.

When productivity of speech is diminished it may be difficult to gain access to the content of the patient's thought. There may be little or no spontaneous talk and responses to questions may be slow and meagre. Sometimes the patient is mute and apparently unable to elaborate any kind of a response. Whatever the condition may be it is essential to make note of the question or other stimulus and the response as well as of the interval of time between them.

Inquiry regarding the *mood* of the patient serves to differentiate more clearly the type of disorder. An impression of the nature of the emotional reaction will have been obtained from the observations already made but it is necessary to record the more significant statements of the patient's mood. Spontaneous expressions usually require amplification through specific inquiry. Leading questions should be postponed as long as possible so that an expression of the true feeling of the patient may be obtained.

Among the first questions are: "How are you?" or "How do you feel?" These may be followed by: "Have your feelings changed in the past few weeks?" or "Do you usually feel this way?" The specific questions asked depend upon the circumstances and the extent to which a confidential relationship has been established between the physician and the patient.

Not only should the responses to these questions be recorded but also some note should be made of the accompanying facial expression, mannerisms, gestures or general attitude. If the patient presents a classical mood disorder the total reaction will be consistent with the verbal expression of the mood. If the disorder is schizophrenic in nature the patient may say that he feels sad and at the same time present no other evidence of sadness. He may even smile or giggle in a silly manner while describing his troubles. Sometimes the response is delayed or none may be obtained. On the other hand the patient may ask what the purpose of such questions is. It is obvious that a routine set of questions suggest stereotyped responses and that the more skillful examiner will be governed as he proceeds by the reactions of the patient.

Whenever the patient is inclined to elaborate his response on his own initiative the questioning should be interrupted at least until the general trend of the remarks is grasped. If the disorder appears to be chiefly emotional the topic of mood should be pursued until this deviation from normal is adequately described both as to quality and intensity. If the patient is depressed it is desirable to make note of suicidal thoughts and impulses. Gaining a knowledge of such tendencies is one of the chief responsibilities of the physician.

The study of the *mental trend* requires discretion and skill. Many patients do not have delusions or hallucinations and others wish to conceal them. Suspicions and delusions may be elicited by a simple question such as, "How do you get along with people?" or "How do people treat you?" Illusions and hallucinations may be disclosed by "Have you had any experiences that seem a little strange?" When the patient is intelligent and obviously free of delusions and hallucinations the explanatory remark that these questions are merely a part of a routine examination is usually sufficient.

If the patient is inclined to be delirious the content of morbid experiences may be learned more readily in a darkened room and by a period of silence during which the patient's tendency to drift from reality may become manifest. Sometimes illusions are elicited by presenting poorly outlined pictures for inspection or by exerting light pressure on the eyeballs

If it is obvious that the patient is hallucinating the examiner may ask quite frankly: "What do the voices say?" The same tactics may be followed when it is desirable to suggest the futility of trying to conceal hallucinatory experiences.

By this time the physician should have established sufficient rapport so that he can encourage the patient to talk freely about his troubles or to give a detailed account of the developments which led to the consultation or to the admission to the hospital. Even when the patient wishes to conceal his morbid trends he may then proceed inadvertently to disclose his suspicions and delusions.

As a rule it is futile to attempt to reason with the patient but the examiner may express a little surprise at the alleged injustice and even promise to make further investigation. Later when it is more obvious that the truth may be known the physician may express regret that he has not reached the same conclusions and he may suggest that there has been some misunderstanding. Even this must be done cautiously as there is always the risk of arousing the patient's distrust and therefore of losing contact with him.

Examination of the sensorium, mental grasp and capacity is especially important in toxic and organic psychoses. Orientation is determined by asking the patient: "What place is this?" and by asking him to give the date, the time of day and to identify the persons about him. When the responses are correct the patient is said to be oriented as to time, place and person.

His memory is tested by asking him to give the dates of the more important events in his life and an account of the events of the past few days. The capacity for retention and immediate recall may be determined by giving a street address, a name and a color which are to be recalled at the end of five minutes, one hour and again after the passage of a day. To this may be added the repetition of a series of digits which are increased in length until an error has been made.

The speed and accuracy of counting is determined by asking the patient to count from one to twenty as rapidly as possible and again in the reverse direction from twenty to one. In like manner the rapidity and accuracy in performing simple calculations is noted by recording the results and the time in seconds or minutes required to obtain them.

Reading and writing tests are made by having the patient read a short story and then give the gist of it verbally and in writing. Questions regarding general knowledge are most valuable when they reveal the scope of interest and the grasp of recent events. This search should be made with due regard for the nationality, cultural level and the general experience of the patient.

The examination is concluded by ascertaining the extent to which the patient understands the nature of his illness as well as the need for treatment.

In the summary of the mental examination the essentials of each topic investigated and a statement of the positive findings should be recorded. It should be possible to gain from this summary an understanding of the type of disorder and some valuable hints as to the treatment required. The summary is not only convenient for future reference but it is a good index of the grasp which the examiner has of the illness.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> For a more detailed presentation of psychiatric case records and methods of examination see the last three chapters of the author's Essentials of Psychopathology.

In order to illustrate the content of a psychiatric case history the following account of the background and development of a catatonic disorder is presented. The actual history consists of a number of contributions from various informants. These documents have been digested and correlated so that the essential facts might be incorporated in the final history in their chronological order and with due regard for their dynamic relationship. Interpretative comments have been added to assist the student in the understanding of the illness.

The family history in this case is conspicuous for its lack of psychotic individuals although there were many suggestions of instability in the family. Marked contrasts in personality traits indicate compensatory strivings for virility and for artistic ideals, a conflict between masculinity and femininity. These divergent strivings and conflicts appear to have been concentrated in the patient. The potentialities of a schizophrenic disorder are found in the parents and the patient's history is a record of the interaction of inherited tendencies, constitutional factors and environmental influences in the evolution of a schizophrenic psychosis.

MISS BESSIE ADDISON.<sup>5</sup> STUDENT. AGE 24

# Complaint

The patient was brought to the hospital because she had become mute, resistive and negativistic. For three days she had refused food.

## Family History

### Paternal:

Father's father was a strong character noted for his absolute honesty and integrity.

Grandfather was sweet, gentle, timid, easily worried and he occupied himself with unnecessary and futile details. After his wife's death he lived solely for his two sons, surrounding them with an atmosphere of over-anxious care.

Father's mother's father was a violent, stern man who ruled his wife and thirteen children with an iron hand. All of his children were extremely frail and hypersensitive.

Grandmother was a frail and unhappy woman who died of tuberculosis when the patient's father was four years old.

Father was a dilettante in music and architecture and developed a "nervous heart" after a love affair at 34. Seven years later, a shy and seclusive man, he was married. He was twenty years older than the patient's mother and soon

<sup>&</sup>lt;sup>5</sup> All names used in this history are fictitious.

became impotent. Shortly after marriage he became an invalid and developed many phobias and compulsive trends. He was dependent upon the mother who readily accepted the burden.

Uncle was intensely sensitive and died as a young man.

#### Maternal:

Mother's father's father was a leader and pioneer. He became so interested in the romantic life among the Indians that he seldom returned to his home after his marriage.

Grandfather was "beautifully proportioned, the flower of culture and manhood, a young Apollo. He was a patron of the arts and built a beautiful art gallery."

Grandmother was a woman of remarkable intelligence and exquisite sensitiveness. She was a talented musician as well as a daring horsewoman. She had two sisters with similar musical ability and two brothers who were military leaders.

Mother had a "psychic sense" and has spent her life "analyzing people and things." Shortly after marriage she realized that she would have to be "both man and woman in the family." Her husband and children were submerged by her aggressiveness. Although she herself has had several "nervous breakdowns" she is interested in calling attention to the similarities between her daughter and the members of the paternal side of the family.

# Siblings:

One brother, five years younger than Bessie, is preferred by the mother and has become her counsellor in all family affairs.

## Personal History

Bessie was a very active and precocious child. She sucked her thumb until five years of age. At four when her nurse was replaced she ate and slept poorly until this nurse was re-employed. There appeared to be no reaction to the birth of a brother when she was five. Later she became jealous of the favoritism shown him by her father. A year after he was born she began to masturbate dramatically in public. An attempt was made to distract her from this habit through lessons in sports and music but it was not until three years later that it disappeared during a course of religious instruction.

Throughout her childhood she was rebellious and had frequent violent temper tantrums. She tried to dominate her playmates and destroyed their toys. In anticipation of a party she would develop digestive disturbance. She had a fear of becoming nauseated in public. At the party she had to be urged to join the group and then she would be active to the point of exhaustion.

Bessie had little regard for her father. "Towards my father I was always slightly contemptuous and disrespectful because I felt he was afraid of me and had little control over me except as the 'holder of the purse-strings' and the concoctor of innumerable obstacles and vetoes which seemed unreasonable and unexplainable to me." The relation to her mother was more conventional but

as will be revealed later there was much underlying hatred. At puberty she became openly antagonistic to her father and supported her mother in parental arguments.

In school Bessie excelled in her studies and in athletics. She had crushes on older girls and received practically no attention from boys. While in college she became attached to a teacher and spoke of her in glowing terms as being "very much like mother." She also established a close friendship with Ethel, a brilliant, driving young girl with mannish clothes and manners. Except for these contacts she was seclusive and ignored her family and childhood friends. Even when her father had a stroke she refused to assume any share in his care. She spent much of her spare time reading.

## Personality

A glimpse of the personality traits has already been given. Excerpts from the patient's own description of herself will afford a better understanding. "Attitude toward emotional life-one of conventionality; should a lady do thus and so-more or less idealistic. As a child was shy, now my feelings have recently become distrustful and occasionally antagonistic but I feel I was naturally friendly. I used to be abnormal and misunderstood. In the sexual line I feel timid and shrinking and I look upon the world alternately with fear and then with assurance. Never understood man's point of view—don't really like women—I feel my approach to the world is through thought. My attitude towards work is one of putting off as long as possible what I have to do and then attacking with vim and vigor to the exclusion of everything else. I always vaguely felt that I would be inadequate and poor in my ability to plan or organize. I feel responsibility keenly and am very conscientious. If changes are not too sudden I can make the grade but I am rather reluctant toward new undertakings. Consciousness of a feeling of inferiority has led to hesitation, strained poses, attitudes of tension, silence to offer a point of view." (Written during a remission, a few months before the last severe attack.)

Notes made by the mother disclose her attitude as well as some of the patient's characteristics: "Masculine, destructive—always wished she were a boy, always chose men's costumes in fancy dress—never had anything to do with boys—never gave out anything socially to man or woman. Vacations: excessive stubbornness, utterly self-centered, resenting anything that interfered with her comfort. Took music off the piano so that no one else could play it. Outbursts of temper—always had to be handled with gloves—always lying on her spine, reading. Did not care about appearance in dress—evaded all responsibilities—waiting for someone to do things—room in disorder—clothes ripped and soiled—let everything go until the last minute. Used and abused me, never added anything to the family life."

With such an eccentric personality it is difficult to assign any period in the life history as the beginning of the illness. As a matter of fact the psychosis is only a morbid exaggeration and an overt manifestation of trends dating from childhood. A formal description of events and phenomena observed would leave the reader somewhat at a loss in understanding the clinical picture. In order to avoid this I have made interpretative comments as the events are

recorded. These comments result from an intensive study of the whole life history of the patient.

## Present Illness

After Bessie graduated from college she quarreled constantly with her father, mainly over her desire to continue studies in Europe with her college friend, Ethel. Her mother's influence finally prevailed over her father's opposition and the two girls sailed in October. They took an apartment together but Ethel soon began to go about socially with a very Bohemian group. For two months the family received effusive letters and then Bessie's enthusiasm waned.

### First Attack

Account of Illness

Excerpts from a letter written to Ethel in December:

"You say you want no answer—but as the night wears on I feel that nothing else will do, so try to bear with me a little while—I know I've been hard to put up with these last three months but do please believe me. . . .

"I suppose it is hard for a healthy person to conceive (I could not have myself four months ago) of arriving at a state in which any effort, physical, such as sitting in a chair, or even holding a book, or mental, such as reading or even thinking-reduced me to a state of weakness and positive feeling of sickness, so that nothing seemed to matter but complete and utter rest and oblivion to the outside world. Such has been my unenviable state for the past two months. Naturally I wanted to snap out of it as quickly as possible, to forget the outside world as much as possible, and to get as little excited—physically, mentally, emotionally, nervously—as possible. Unfortunately my natural tendency is to become interested about whatever is going on. When I'm well and strong, of course, this makes no difference, but when debInterpretative Comments

This letter is especially valuable in that it so clearly portrays the emotional state of the patient during the first few months of her illness. A desperate attempt was being made to regain the affections of Ethel, the last effective contact with reality. In adult life there was no attachment comparable with that for this girl.

It is probable that Ethel did not fully reciprocate (she has since then married) and there had been disagree-The attending physician states that Ethel was a girl of great intellectual ability and physical energy. It was his opinion that Bessie could not keep up with her. As Bessie succumbed she experienced feelings of weakness and tension. Reality became so painful that she wished to shut it out entirely. Any stimulus was too exciting. She behaved as though she had thrown herself prostrate at the feet of Ethel. This was of little avail and weeks passed before the "benumbed state" gradually wore off.

As far as this letter discloses Bessie might not have been more than profoundly love-sick but her physician states that she passed beyond the olezz rules it makes me all tense inside, unable to eat. With my natural tendency to curiosity—the only way to avoid this excitement is to shut myself up, force myself to relax, and close my mind to everything. (Hence when I 'look bored' I am really forcing myself not to register fully what you're saying.) This sounds perfectly absurd even to me, but it's actually true. I've had the haziest consciousness of the world at large. You think I exaggerate no doubt but until my last week I didn't have sufficient wits even to read and that until the last few days I never spoke to a soul-for two weeks!

"All this as partial explanations of my behavior, which even in my benumbed state I realize may be trying even to the patience of such a saint as yourself. I've not been fit to live with decent human beings and the nearer I come back to life again the more I realize what an ungrateful pig I was.

"Ethel, how could you even think, much less suggest, such horrible things? You know I adore you. I think at the end of four years of college I might be trusted to know whom I cared to live with. There aren't many, I admit, but once accepted among the sacred few, the membership is a life one! Why in God's name do you think I fought and struggled so hard to get here if it wasn't chiefly that I missed you so badly in the summer and couldn't bear the thought of losing the chance for a winter here of all places, with you of all people. I can't even tell you how sorry I am to have been in this dead state for so long. I've never been happier in my life and should be quite limits of a normal reaction. During March and April she was in a sanitarium gazing placidly at the ceiling. She was inclined to misinterpret bodily sensations and expressed the idea that one side of her back was "growing out."

Such misinterpretations are probably little more than an attempt to describe abnormal physiological conditions resulting from months of intense emotional stress but there was a tendency to exaggerate and to weave bodily sensations into fanciful constructions. However disagreeable such bodily changes may be they were less painful than the loss of a lover. To the extent to which Bessie could divert interest and feeling into bodily functions she avoided facing her real problem. Such an escape was not the result of deliberate choice. Her emotional life had been too deeply affected to be governed by logical processes. The reaction was largely instinctive and physiological, much more profound than that resulting from conflict with purely conscious desires.

As yet there is little hint of emotional readjustments and compromises which were taking place at this time. It is evident however that her resources are very limited and that she feels destitute without the affection of Ethel.

In some respects the emotional reaction was similar to that of a depression. She was very unhappy and expressed feelings of self-condemnation. This disguised somewhat the underlying difficulty—her own mortally wounded feelings. Ethel had not only deserted her but had thought "horrible things" about her. This

content to spend the rest of my days with you."

rejection was especially painful since Ethel had been included among the "sacred few" with whom Bessie chose to live.

Bessie was still capable of making a desperate appeal for the return of affection but only after a period of "complete and utter rest and oblivion to the outside world." The final method of escape in her psychosis is already indicated.

#### Interval

In the latter part of the next spring Bessie left the care of her physician and was accompanied home by her mother. Bessie seemed to have recovered from her illness except for a strong tendency to find excuses for her inadequacies. During the summer she was seclusive, read a great deal, showed no interest in sports and was brusque with her friends. She manifested no particular interest in her physician and nothing unusual was noticed in letters which she wrote to him in June and November. In the autumn she displayed great inertia in looking for work. In the following January she was much disappointed in not receiving a good teaching position after being almost accepted and except for a little secretarial work for a cousin she was unoccupied.

#### Second Attack

After this interval lasting about ten months her mother became ill and was confined to bed. Bessie tried to be a companion to her father but they frequently quarreled. In March she burst angrily into her mother's room saying, "You must get up and come downstairs at once, father is beginning to make love to me." Bessie had been confiding in her father that she was in love with Dr. Earl, the physician who had treated her in Europe, and she was greatly shocked when her father in turn disclosed some of his clandestine affairs. In trying to calm her he had indulged in the unprecedented act of kissing her on the forehead.

In spite of the quarreling and this violent reaction there was another aspect of her feeling for her father. This is presented in the following note written a month later.

Darling Daddy:

Please don't ever worry any more. It wasn't your fault and you have been entirely adequate. I have taken over your job and am going to share it with Dr. E—— because it is the natural thing to do. I couldn't understand before because I wasn't old enough. Forgive me—I love you.

Bessie

For six weeks following this episode Bessie remained in bed and her condition rapidly grew worse. She spent her time writing furiously even while

gazing into space. This behavior continued during April and May. She was rapidly losing weight. Among her complaints to her physician were "lack of purpose, internal conflict, nervous strain, moments of extreme fatigue, maladjustment to society and parents, duality of personality, apparent loss of all power of conversation, and difficulty in getting on with members of the opposite sex." Her chief problem was loneliness and sex tension. One night she came to her mother's room and spoke of her "abdomen protruding" and "fulling out" and her "mind turning to jelly." She also said she had "never liked anyone but Ethel and Dr. Earl."

At about this time she flung on her father's desk a note stating, "Dr. Earl will soon take over your job." A message from Dr. Earl stated that he had been receiving, daily, incoherent cablegrams. Bessie was then readmitted to a sanitarium where psychoanalytic treatment was undertaken.

# Account of Illness

The following excerpts from Bessie's notebook indicate what had been seething within.

# Conflict with Family

I hope she (mother) knows what she is doing.

You've never been natural (me to mother).

I've always been natural (me to daddy).

You're the most abnormal and unnatural child I've ever seen (mother to me).

You're turning into a perfect shrew! (daddy to me the summer before I went abroad).

I never had a chance until I went abroad with you.

O that terrible jiggling.

Nobody's ever understood my ailment.

Why can't father ever keep anything to himself.

# Conflict with Religion

Crossing the bar—lawyer—defense of the problem child—out of the mouth of babes and—Catholic—

## Interpretative Comments

As already indicated the patient never adjusted well to her family. She was jealous of her brother and protested that he had had an allowance while she had none. He was permitted to drive a car at 14 and she had to wait until she was 18. There was much unexpressed antagonism to the mother who had acted as nurse for the father. Bessie had wanted to be a nurse but the family felt they could not afford the expense. Revenge obtained through illness is expressed in: "I guess this (cost of treatment) is a good joke on them."

While in the sanitarium the mother sent rewards for achievement and Bessie was expected to respond in writing. This was most difficult for her and she would be depressed and worried for days before actual acknowledgment. When anyone spoke approvingly of her mother Bessie's face would become set and her body would stiffen. (This temporary reaction later became fixed in her catatonic state.)

Some of the conflict over religion may have been due to the differences in the family. Bessie and her mother were Catholics and attended services regularly. The father was a Protesnon-Catholic—why can't Catholics understand non-Catholic's point of view. Historical Christian—saint—what is distinction? Having laboriously examined both sides of question can't find none. Insanity—in sanus. Unclean. Leper, n. Person with leprosy perh. attrib. use of obs. leper.

## Conflict with Sex

What connection have ideas with sex? What exactly does difference in sex mean. Is it only physical? Has it no effect on the psychological side? What is the difference between wit and humor? What is meant by 'getting the point'—pencils, pins, have points. What does it mean to 'sublimate your primary appetites'? Becoming aware of your instincts? What is 'second nature'? What are the facts of life and why are they so elusive?

Precise—the p. (exact, identical) moment.

Foreskin—prepuce, n. Loose tegument covering end of penis so preputial (-shl), a (f.l. PRAE putium perh. = Gk. *Posthion* penis).

Who ever cares about birth control anyway?

MADNESS A LA MODE

OF

THE GRAND BONFIRE OF

INHIBITIONS

by

LA DONNA SERPENTE (SERPENTE

NELLA DONNA!)
Or Perhaps the taming of the shrew?

I want Dr. Earl to come back to look at his daughter—7 A.M. I must come to a U with him—U = Union.

\* \* \*

Won't you ever come and tell me what to do? Or does it please your

tant who never attended church services. For a short time Bessie wished to become a nun but she says that religion did not mean much to her until the past year or two.

About a year before the onset of the second attack she was aroused sexually for the first time through being kissed by a cousin, a married man. The experience was pleasurable but also a shock. There were no further adventures but it is evident that she continued to be preoccupied with sexual matters.

While she was being treated in Europe there was no indication of an attachment for her physician but a year later she wrote that she had fallen in love with him at first sight. This was undoubtedly a psychotic reconstruction. Her last messages to him were a series of cablegrams in English, Italian and German as well as letters consisting mostly of bits of torn street car tickets, dressmakers' cards and pieces of colored elastic. He was old enough to be her father and apparently she had accepted his attentions as though she were a dependent child.

While in this state of excitement she expresses longings which at other times were repressed. She easily passes from the rôle of daughter to that of an aggressive lover. There is uncertainty and she offers the choice of chronic illness if he does not respond. It is noteworthy that she thinks of illness itself as a "very pleasant existence"—a vision of future events.

As the exhilaration increases she no longer feels constrained to symbolic expressions such as "la donna serpente" (the serpent lady) or serpent in the lady but frankly expresses her sexual desires. There is an alterna-

lordship that I should continue indefinitely in bed melting into mad maunderings—really a very pleasant existence—but it would be more fun if you were here.

\* \* \*

Hurry up, stupid. It isn't decent to keep a lady waiting like this. Are you a cad? A bounder? Come on and take the plunge—after all, this is leap year, you know. Do you want me to come right out and ask you to marry me? I do draw the line at that. So it's up to you, sweetheart. Do you want your wife and home with peace and quiet or do you want me to be a neurasthenic for the rest of your days.

\* \* \*

I BEQUEATH ALL MY BOOKS AND PAPERS, MY LOVE, MY LIFE TO MY FATHER.

\* \* \*

Sanity—unconscious and conscious—Loss of Individuality—Freedom from strain—The peace that passes all understanding.

In response to reading some analytical psychology a few months later she continues with:

What are mental attitudes—complexes. What are dreams? What is day dreaming?

\* \* 1

What is meant by being detached—indifferent. How can you lose your mind? What is insanity—sanity—disease.

The last day in London I went to St. Paul's and climbed and climbed innumerable steps right up to the dome and looked over the whole city. Such a lovely view. It was late in the afternoon. Lights were coming

tive for Dr. Earl of having a "wife and home with peace" or having her a neurasthenic indefinitely. The resemblance of this fantasy to the actual relationship in her parental home is obvious. A year later she wrote: "I used to carry on imaginary conversations at night-either reconstructing differently a situation that had occurred or constructing differently some new and wholly imaginary episode in which I usually played the part of comforter or companion of a hero in distress—usually an older man. I never indulged in these fantasies deliberately as an escape until one summer a few years ago." (Patient probably never consciously identified the hero with her father.) The vague appreciation of futility in her efforts is expressed by complete resignation in a will bequeathing "my love, my life to my father."

The glow of the exhilarated state was by this time dying out and she was left with symbolizations and with cold, intellectual abstractions. For a time she had enjoyed the thrills of a fanciful love affair in which real people were included. In a state of exhilaration resembling a manic attack she had escaped for a while from the melancholy contemplation of her own problems. The accompanying emotional reaction tended to disguise the nature of the underlying disorder.

On admission to the sanitarium she seemed to be entirely out of contact with reality. When addressed she turned with a slow smile and it was evident that she was aware of her surroundings—"That is the trouble with me, I hear entirely too much." Her arms were held rigid at her sides and her hands were clenched. After three weeks she had lost most of her

on here and there and there was a soft and pleasant haze over everything. It was sunset, and somewhere a light went on in somebody's dining room window and someone was very happy because her husband was coming home to dinner. But I was all alone so I went in and whispered in the gallery and got back a faint little echo with which I had to be content. (An interval of reminiscence and a part of a book which she was going to write. A lovely scene but she had to be content with a "faint little echo.")

Perspective—sense of past—attention and accuracy plus stimulus to imagination.

"The maternal instinct is enough to make a marriage go on the rocks in three months."

"One thing I like about Bessie is that she laughs all over." Bessie doesn't laugh—she just looks at them and thinks!

I feel like a policeman directing traffic. Why directing? When I sit in bed and do nothing? On the outside looking in.

I feel as if Judgment Day were at hand.

Excerpts from her analysis are as follows:

In a dream she hears a voice saying, "I guess I'll have to go along with her." The voice seemed to be that of Dr. Earl or "possibly my father."

While giving associations to the dream and referring to a boy she disliked in childhood she suddenly interrupted with, "Oh, for goodness sake." She put her hand to her mouth and could not go on. She then recalled being dragged home from a party, screaming. She had done something dreadful but could not recall what it was. On request a few days later

tenseness and made an effort to join in general conversation.

One of her first questions of the nurse was whether she had read "The Captive." Bessie then asked to have the story repeated. After her memory had thus been refreshed she said that a college friend had had a similar experience. A more frank expression of her own homosexual interests probably would have been too painful.

Under the stimulus of a riding master (who reminded her of the Italian Riviera) she began to take an active interest in outdoor sports but as soon as he showed interest in someone else she went into a state which she called "renunciation." She tried to renounce food, books and interests in general. It appears therefore that the pattern of withdrawal from reality was well established and easily available. It had become a natural response thwarting of her heterosexual contacts. There was an increasing tendency to detachment from reality and disintegration of her own personality. Her conversations with herself suggest the dissociation more obvious in hallucinated conversations. At the same time there was a vague feeling that her own personal career was about at an end.

Psychoanalytic investigations are supposed to be a combination of study and treatment. The technique employed must be adapted to the needs of psychotic patients and is successful only when applied by a skilful and experienced psychiatrist. By this method of investigation it is often possible to trace the origins of adult problems to childhood events and relationships.

It was evident that Bessie had stumbled upon a painful association she brought a story she had written about this girl—"Like a dog, straining at the leash—howling with rage—knowing that her nurse could not manage her—that even in being dragged home to her mother for punishment her defeat had in it a taste of victory. Was she dragging the nurse or was the nurse dragging her?"

when she interjected "Oh, for goodness sake." She behaved as though she had just caught herself in time before blurting a secret and yet she could not recall what it was. Her story inadvertently discloses the setting.

After much delay the mother supplied the information that Bessie at the age of six "masturbated violently in public, making grimaces and uttering grunts." Bessie never acknowledged this habit.

In the late autumn of the second year of her psychosis Bessie was able to visit at home, seemed to enjoy herself and spoke of leaving the sanitarium. In December she was discharged to continue her treatment with a lay analyst. At this time she was described as being very masculine in appearance and as having practically no breasts. She held her right shoulder hunched up and she proceeded slowly, planking her feet down in a heavy, ungainly manner. X-ray examinations revealed abdominal ptosis.

At her first interview with the analyst Bessie gave the impression of trying to hold herself together in a "persona" manner. She was withdrawn and gazed into space. When reference was made to difficulties frequently noted between children and parents she put her fingers to her mouth as if holding something back. She soon lapsed into a dreamy state and when questioned said she was thinking about a book she was planning to write. She seemed to realize that she was not making progress and remarked, "I have been trying for over two years to find out where I am headed for and what is the purpose of life."

In a note written in the following January she said: "Lay awake all night, sweating with strange internal sensations somewhat like pre-menstrual cramps or perhaps a little what one might imagine pregnancy and birth feelings to be like." A character in one of her dreams made her think "how like my father—it horrifies me to think I am acting like my father who can never decide anything and seems to spend most of his life in bed and by this means commands attention." The vision of her father seems indistinctly associated with the sensations of pregnancy and birth.

In February her mother was ill again and Bessie was unusually affectionate and concerned about her condition. It seemed that Bessie was inclined to feel better when her mother was incapacitated. Although the physician had advised that Bessie live apart from her family and not see her father this recommendation was not carried out. She spent a week getting unpacked and then she suddenly announced that she would have tea with her father. She did visit with him but she later protested to the analyst that "being at home seemed utterly impossible and too awful for words."

In her room she had a box of notations which she had made in her first attack as well as some letters from Dr. Earl which she read over and over again. She

was eating poorly and when her mother brought a glass of milk Bessie made a gesture of throwing it at her. The mother had been in the habit of reading Bessie's notes and reproving her for hiding them. Bessie felt that this was an invasion of her own personal affairs. The mother had also been telephoning to the analyst after Bessie had left the house. One day Bessie happened to overhear the mother's part of the conversation. When Bessie returned from the analytic session that day she "stood for nearly two hours in one spot while I (the mother) tried to undress her and get her to bed." Psychoanalysis was then discontinued.

Bessie was thereafter kept at home until her present admission. She continued practically mute, became increasingly rigid and gradually stopped eating. She was then admitted to a psychiatric hospital in April, nearly three years after the onset of her illness.

# Physical Status on Admission

She was noted as being a tall, angular young woman having marked bony prominences. She was dehydrated and suffered from malnutrition. There was excess hair on the extremities and the skin was dry and scaly. She had an enlarged clitoris. The usual routine laboratory examinations were essentially negative.

## Mental Status on Admission

The patient lies quietly in bed apparently little concerned about her surroundings. Awkward postures are maintained. When she is lifted to a sitting position she supports herself with one arm but remains in a strained position. After a while her legs and lower abdominal muscles begin to tremble violently but she makes no attempt to change her position. When she is laid down again by the nurse the trembling immediately ceases. There is inconstant marked cog-wheel resistance to passive motion. Voluntary movements are infrequent and are slowly initiated and carried out. When requested to move an extremity the response is delayed and consists merely of a slight contraction of the muscles. She slowly takes the physician's hand and exerts slight pressure for a moment. She does not withdraw from a pin prick even when told to expect it and after seeing the pin. She maintains a fixed stare and there is no movement of the eyes either spontaneously or upon request. There is an irregular flickering of the eyelids and they are never completely closed. She resists attempts at closing or opening them. She seems well aware of movement within her range of vision. When a strong light is held in front of her face the eyeballs roll upward. The pupils contract to light and dilate on sudden pain or following a loud hand clap.

She does not take food even upon urging and she allows fluids to dribble from the corner of her mouth. Her tongue and lips move rapidly as though she were talking but no sound is heard. Saliva accumulates and through constant champing movements of the jaw it is beaten into a foam which drools from a corner of her mouth. On request she protrudes her tongue to a slight extent and the silent talking movements are then interrupted for a few moments.

To direct simple questions she makes an effort to respond and at times a whisper is heard. A single word is often repeated several times. These responses seem to be merely a part of the constant whispering movements. A few of the audible replies are as follows:

When did you see your mother? "This morning." (c)

Who is your doctor? "Dr. K---." (Former physician)

What is your first name? "Bessie."

The spontaneous whispering movements do not divulge any message which can be understood. When given paper and pencil and asked to write her address she allows the pencil to slip through her hand until it is finally grasped near the eraser. Without making any attempt to get a better grip on the pencil and without looking at the paper she writes, almost illegibly, her name and street address. On an attempt to write her age only the digit "2" is clearly formed. She identifies a pen, a pencil, a flashlight and a pair of scissors but does not name keys or a dollar bill. She gives the physician's name correctly and says she is in a hospital.

Very little emotional response is observed. When painful stimuli are applied the whispering movements become more rapid and there is a sudden start in response to an unexpected hand clap. She seems unconcerned about exposure of her body. Her eyes light up slightly when her mother is mentioned but there is practically no response to reference to her former physician. When asked why she does not eat she slowly and faintly writes, "not hungry," at the same time phrasing the words several times with her lips.

# Course in Hospital

It was necessary to feed the patient by tube but as a result of increased fluid and nourishment there was a rapid amelioration in the dehydration as well as a gain in weight. Following this the improvement in the patient's condition was very slow. In order to acquaint the reader with the actual problems which confront the physician at this stage of the illness some of the more significant notes made by physicians and nurses are presented. It is hoped that the comments made upon the notes may also facilitate an understanding of this illness.

## Notes Made by Physicians and Nurses

4/6 While being prepared for warm pack said, "Don't—I'm tired." Do you wish anything? "I don't need anything, thank you." One time while particularly distressed, cried out, "It isn't fair to my family to go on."

4/8 Being bathed and keeps re-

### Comments

Feelings of fatigue are seldom so clearly and frequently expressed by catatonic patients. There is much evidence, however, of physiological disturbances during the acute phases of the illness. It appears that long continued emotional conflict results in faulty metabolism and that toxic

<sup>&</sup>lt;sup>6</sup> Henry G. W.: Catatonia in animals, Amer. J. Psychiat., 11: 757. Gastrointestinal motor functions in schizophrenia, Amer. J. Psychiat., 7: 135.

peating, "Don't touch me." Shampoo mentioned—"It is no time for that now." Keeps pinching her throat and once said, "I'd like to kill myself." At night keeps repeating same words over and over—sounds like "O mother, O mother."

4/10 Prefers to remain in same position and resents being moved. When changing pajamas says, "Can't change it, can't change it." On being turned in bed says, "I'll tell my mother on you."

4/14 Resistive to care, saying, "No, no, leave me alone."

4/18 Perspiring profusely while up in wheel chair and during enema.

4/21 Asked if she enjoys being up, says, "It is very tiring." Asks for water and when it is offered says, "No, thank you, I don't care for any."

4/24 Overheard whispering to herself: "An injustice . . . tell your mother . . . please kill me . . . a trivial notion . . . she's good and strong ruining . . . push me ... ruining, away . . . I'll kill myself . . . you should never let me do it . . . I'm the one to go without . . . Yes, but you will . . . I know you're not ruining my reputation . . . You have given up . . . you cannot undo something. You'll never understand just what you did . . . not in the room . . . given out the wrong invitation and you know it ... ruining yourself ... not the kind. . . . . "

4/27 More resistive than usual. Does not want bath. "I don't need a bath—I am very comfortable." With urging walks into bathroom and gets into tub.

4/29 Asked if she does not wish to join the others. "No, too many people."

5/1 Soiling self if not carefully

substances arising therefrom produce irreversible changes in the function of the brain. Drooling and rigidity are observed in diencephalic lesions. This patient also showed rabbit-like movements in the central portion of the face as though the archipallial centers of taste and smell were involved.

It is evident that Bessie no longer wishes to live and prefers to be left alone. She resents the attentions of the nurses. They are a part of the real world insisting upon certain standards and habits of living. She talks as though she were a child again who could appeal to her mother whenever a difficult situation arose. Like a contrary child she automatically resists and in addition she seems to have a feeling that she is unable to do anything, even the simple matter of changing her pajamas.

The frequent complaint of being tired is probably a true representation of the patient's subjective experience. She has been in bed for several weeks, unable to relax. Emotional conflicts with no effective solution are exceedingly fatiguing. Excessive perspiration on exertion is in keeping with such a condition and may also be a manifestation of a toxic state.

Although a patient may be lying quietly in bed apparently indifferent the flickering of the eyelids and movements of the lips usually are associated with very active mental processes. Occasionally something may be overheard which discloses vital and unsolved problems. It is evident that the situation with this patient is desperate. Contrary impulses follow each other and she talks as though conversing with several intimate associates: "Please kill me

watched. Taken to toilet and after ten minutes voids. Then says aloud, "Now I can go to bed."

5/6 Continues to drool but for first time is seen to-day wiping saliva away. Has been lying in bed holding head off of pillow. After prolonged bath pillow removed. Lies flat in bed, then appears in distress. Says "I want a pillow, pillow," and immediately bursts into tears.

5/8 Holds head up from pillow and rests on elbows as long as permitted. Walks with a slow, stiff gait, head thrust far forward and arms held rigidly at her sides. Seldom changes her rigid posture while sitting.

5/20 Prolonged bath suggested. "I don't want to take baths—it does help me."

5/21 Walking about thirty feet to bathroom. "It's too far."

5/22 Stuck fingers in rectum and smeared toilet and clothes.

6/8 Refused fluids, crying, "I can't swallow fluids." Spit out orange juice and wept when fed by tube.

6/10 Asks frequently to remain in bed. "I'm too sick to be up."

6/11 Drank glass of water after being urged but became very agitated, shaking her legs and arms and sobbing, "I'm too weak to stand all of the exertion." Continued to put hand near genital and anal regions while drinking water.

6/15 Spoon-fed solid food but took fluids poorly. "I'll try but I can't swallow."

6/16 Wept after being given breakfast. Whispers to herself continually, "You know that you are not able to eat—what you should do is just go to bed and stay there."

6/17 Asked to feed herself but suc-

...a trivial notion ... I'll kill myself."

Drooling is commonly observed during the acute stages of catatonia. There is probably an actual salivation and also the inability to deal with saliva present. Some months after a patient had recovered from the acute stages of the illness he explained his drooling as the result of an inability to decide whether to swallow or expectorate.

Lying on what has been termed a "psychic pillow" probably is part of the general state of increased tension and the tendency to universal flexion. It is continued automatically although, as in this case, it may be painful. Apparently it is the result of over-activity of centers in the brain governing automatic movements as voluntary flexion of the neck in this manner soon becomes too painful to be maintained.

Eating, drinking and elimination may present problems similar to those of childhood. Both feces and urine may be retained as though in defiance of a hostile world and the habits of spitting and smearing may be re-Physiologically a vicious vived. circle is established. The processes of elimination, especially from the colon, are greatly retarded and this in turn greatly reduces the desire for food. Ingestion and excretion also have symbolic meanings which may seriously interfere with digestive processes.

Probably all individuals talk to themselves, at least inaudibly, and when without preliminary logical reconstruction expression is given to contemplation and fleeting thoughts the incoherence seems pathological. The schizophrenic is no longer ceeds in no more than getting spoon near to her mouth. At elunch rapidly but kept saying, "I don't need it, I don't want it, leave it."

6/22 Tense, resistive and continues to hold head up from pillow. Weeps when nurse forces head down.

6/27 Keeps fingers pressed tightly against throat. Very irritable when nurse interferes.

6/29 Observed tying knot in belt of dress with one hand and clasping throat with the other.

6/30 Looks into door of each room as she passes. While sitting on toilet attempted to hold urine back by pressing on urethral meatus. When nurse interferes weeps loudly, muttering to self, "Don't sit on toilet—fight them." Will not take fluids voluntarily.

7/1 Lifted into tub by nurse, splashed water and then said loudly, "That was a big splash, wasn't it." Taken to toilet and kept repeating, "I'm not paying for this."

7/2 Refuses fluids, holds on to throat, talks constantly. "Don't distract me—you are getting \$5,000 for this so don't upset me. They tell me I don't have to eat—they tell me I don't have to do anything I don't want to do but you make me." Will not say who is meant by "they."

7/3 More resistive in taking fluids saying, "I can't do it—I can't do it." Holds head forward on chest and exposes body at every opportunity.

7/7 Weeps bitterly if forced to eat or to go to bathroom. Refers to herself in the third person: "She says that she doesn't want to. She says that she wants to stay in bed. Please don't make her do that." Continues to move lips as usual and spends much time scribbling unintelligible symbols. Keeps head far forward over

troubled with logical sequence and has elaborated a symbolic language to suit his own fancy. What he does not accept as a part of himself he projects upon some other person or agent. "You know that you are not able to eat" sounds like an authoritative admonition which justifies the patient in carrying out her own wishes.

As the schizophrenic patient is observed from day to day it becomes evident that a hetrogeneous mass is incorporated in the mental activities This patient not only does not wish to void as an adult but prefers to wet herself as though she were a child. She actually held her hand over the external opening to prevent urine from leaving her body and wept when taken to the toilet. She seemed to enjoy splashing water. At the same time she seemed aware of the expense of her treatment. She talked constantly, felt that others were distracting her, appeared occupied with her own dream world and yet inspected the rooms of other patients as she passed. For weeks she maintained the attitude of clutching at her throat but actually made no attempt to injure herself.

At all times it is desirable to try to obtain the coöperation of the patient even in attending to simple physiological needs. This entails careful study of any clues regarding the understanding of the patient's attitude and behavior. If the treatment is such that confidence is inspired many problems are more easily solved. Patient and tactful guidance of activity is required and coercion is used only as a last resort.

The resistance to ingestion of fluids and to elimination appears to be similar to that of the child who is thus striving to dominate and to fruschest, her legs widely separated and her abdomen protruding.

7/8 During breakfast remarked, "Please don't spoil things. I want to be well for my mother."

7/9 Soiled clothing. Tried to pinch nurse. Was asked how much chocolate she could drink. She smiled and indicated one-half glass. Promptly started to drink it saying, "Mm—that's good," and then let it run out of her mouth.

7/12 Voided small amount but bladder was still distended. Told she would have to sit there until bladder emptied. Said, "Don't do it for them, you did some—you won't have any left if you do any more." Put finger on meatus to try to stop flow and wept loudly when nurse interfered.

7/13 When nurse is urging her to do anything, sometimes strikes and says, "Get away! Let me think—you distract me—won't you leave me alone—I can't hear what they are saying when you're talking to me."

7/15 Being spoon-fed, "Please don't distract me, I want to be well when mother comes. I want to lie down this day and just rest-I'm sick. Why doesn't the doctor feed me? Don't hold my head up-it hurts me and I can't swallow." When permitted to help herself she spits out practically all she puts into her mouth. Soiled herself during mother's visit and stuffed toilet paper under soiled clothes. Struck nurse and when clothing was changed cried loudly, "I don't have to change until mother leaves."

7/16 Tried to slap and scratch nurse when told to void. Said in loud, emphatic voice, "Tell her you are not to void—you don't have to."

7/18 Stamped feet in temper tan-

trate efforts made in habit training. Such behavior in an adult represents a gross departure from habits already well established and it is associated with internal conflict so intense and so prolonged that personality disintegration results.

Among the many ways of escape from this intolerable situation is that of objectifying the personal relationship. The patient may then speak of himself in the third person or as though he were someone else.

To indicate a desire for food as well as pleasure in tasting it seems incompatible with letting it run out of the mouth. Yet this merely illustrates the conflicting impulses with which the patient must deal and which probably contribute to the resistance to any form of activity.

A change in the attitude toward the mother is now more evident. The patient behaves as though she were an infant. Defecation in her clothing has again become a common event and perhaps an infantile symbol of health. It may also represent a lingering antagonism and a most effective means of being naughty.

By this time it is almost certain that the patient is hearing voices. While in London two years ago she had to be content with an echo. Months later she was occupied with making notes of conversations she had had with her parents and regarding her conflicts. Since admission she has spent much of her time making scarcely audible speech movements. The content, occasionally overheard, revealed a rapid succession of conflicting impulses including killing and being killed. Her talk might still be little more than a verbalization of her own thoughts and feelings but now it seems that she is trum while notes she had made were being read by mother. At times while being fed talks as though addressing someone else. "Why don't you tell her I don't want any more to eat? Tell her to stop. Tell her to stop spitting that out."

At night resistive to being given fluids. "You must not do that—not now! There! You've spoiled it all—you made me swallow poison." Cried loudly.

7/21 Resistive to feeding, held jaws shut, refused to swallow, grabbed nurse's hands and kicked at tray. Repeats, "No, no, I don't want breakfast. My family doesn't want me to eat anything. I'll tell my mother when she comes. Don't force me—I'll feed myself. Mother will come and feed me this afternoon." Occasionally cried out, "Bessie, Bessie, why don't you tell them you are doing your best?"

7/22 Sat in living room, played solitaire with nurse but continually asked to go back to room. Later defecated in clothing. Played ping pong skillfully but wept and struck at nurse and said she was "too tired to play."

7/27 Talked almost constantly to self. After being fed by tube, said, "O Bessie, what shall I do to you—you are getting so terrible lately? Why don't you thank the doctor, Bessie, when he is so good to you. I want to die—I'm so sick and weak."

7/28 Coöperative at hydrotherapy. Resistive to being taken to gymnasium saying, "It isn't right." Dressed and undressed herself without help.

7/31 Continually exposing self while in bed and in prolonged bath. Blinking of eyes has become less prominent.

intensely interested in messages from unseen persons. She orders the nurse away. "I can't hear what they are saying when you're talking to me." What she is listening to so attentively is still her own thoughts but the division between self and environment has become increasingly vague and what is not readily acceptable is projected onto the external world. Someone else now makes the unpleasant remarks which her own conscience formerly dictated.

In the development of speech the child usually speaks of itself in the third person first and only later represents itself by the pronoun "I." The process is reversed in schizophrenic psychoses and the patients therefore often speak of themselves in the third person. Bessie now appears to be in the position of admonishing someone else. This makes her own problems less personal and facilitates the detachment from her own official personality, an individual who in real life proved to be a tragic failure.

Automatic resistance or negativism is one of the most fundamental defensive mechanisms. It is an expression of submission and hostility on the part of an animal too frightened to attempt flight or to make an attack.

Bessie's mental processes have become so dissociated that she expresses what her mother might say—"You are getting so terrible lately"—and what her own response might be to such a reproval—"I want to die." Identities become fused and, in a psychological sense, several individuals may be incorporated in the personality of the patient.

Such a dissociation also makes it possible to play games requiring the skill and close attention of a person 8/6 Smiles occasionally and answers questions in low tone of voice. Begged doctor not to feed her by tube saying she was fat enough. Smiled broadly at doctor's suggestion that she eat a large breakfast in the morning.

8/7 When invited to go to occupation therapy remarked, "I don't want to go up there—I am too tired."

8/9 Slow in taking bath and dressing herself. When urged to hurry she attempts to slap and scratch nurse. Frequently remarks, "No, I must never hurry. Tell her to go away, will you? She distracts me. I want to be left alone." Smiles when shown new underwear sent by mother.

8/12 Upper half of body jerks suddenly at times. Continues scribbling unintelligible notes.

8/19 Not resistive to being fed by tube and does not try to regurgitate. Says, "No, Bessie—don't get upset. Make Bessie behave. I'm too sick to get up."

9/7 Refused to eat and threw food on floor but after some hesitation picked it up as nurse suggested.

9/15 Taken to toilet and voided small amount. A few minutes later she voided a large amount in her clothes.

9/16 Somewhat playful at times—tickles neck of nurse and smiles. Stood in awkward position until put in bed. Door left open so she could go to toilet but she would not go. When door was locked she tried to open it.

9/19 Said loudly several times, "Wake up child—tell them what you want." Knitting steadily for one-half hour as long as nurse did same thing. Mumbled during mother's visit but repeatedly asked her to stay.

intellectually intact while incongruous impulses and feelings are expressed. The weeping is out of harmony with playing a game of ping pong. The defectaion seems to be an infantile protest.

In reviewing personal events with the mother it was learned that Bessie, while masturbating in childhood, was in the habit of blinking her eyes and moving her tongue. This has now been observed for several months and it is not impossible that some of the eye and mouth activities of the present may be a slightly disguised renewal of old pleasures.

Bessie no longer lives as an integrated person. She is merely structurally a unit but behaves as though she were an adult and at the same time an infant. She no longer controls the responses to her many conflicting impulses. She can dress herself, smile at a joke and at the same time throw food on the floor or attack those who are patiently attending her.

The inability to modify the responses to impulses makes schizophrenic behavior somewhat unpredictable and apparently foreign to the actual external stimuli. The behavior is often prompted by misinterpretations of external stimuli and by projections in the form of hallucinations.

She takes the physician by the hand as though she wishes him to stay and as though she wanted his assistance but she is unable to disclose whatever may be troubling her. It is probable that a flood of conflicting thoughts makes it impossible to deal with a single thought sufficiently long to express it. She likewise wants her mother to stay but nothing is said which gives a clue to her needs. She behaves like a child who demands the

9/27 Cried, kicked, pulled her hair and said, "Get out of here—there's no point in going to bed."

10/25 Scant menstrual flow—the first since admission to the hospital.

10/30 Danced well for a few minutes starting with hands in correct position but soon one was slowly moved back to its usual position at her neck.

11/4 Very cooperative in routine care. Shows more interest in personal appearance and watches what is going on about her.

11/5 Played fairly good game of bridge.

11/6 Agitated in evening while being fed. Weeps and cries, "No, no. It isn't fair."

11/7 Very provoked during mother's visit. Stamped feet and threw things about.

11/11 Stood up most of day refusig to take more than a few steps at a time. Watches what everyone is doing. Several times put head down low and shook it as though trying to dislodge something from her head.

11/12 Weeping at intervals. Continues to press finger into neck. Will remove it on request but immediately puts it back again.

11/13 Very antagonistic, resistive and combative. Slaps, kicks and scratches nurses. Weeps loudly and stamps feet. Spit out breakfast and when left alone with lunch she handled the food but did not eat any.

mother's presence to gratify purely selfish interests. The infantile relationship to the mother is reestablished. Only once did she mention her father.

While disorganization and regression are taking place there is also some tendency to readjustment. She admonished herself as though it were her mother talking and she is still amenable to suggestion regarding her behavior. Now and then there are glimpses of the original personality shown in her tendency to be playful with the nurses.

As the acute phase of the illness passes the patient is often able to resume many of the former activities or he may be productively occupied with an occupation less complex than was possible prior to the illness. Much of the manual labor in public mental hospitals is done by fairly well readjusted, mildly deteriorated schizophrenic patients. Such labor performed has therapeutic value for the patient in addition to lessening the cost of his treatment.

Among the most delicate indices of mental health of women is the menstrual function. Irregularities in the duration and amount of the flow as well as in the intervals between periods are characteristic of schizophrenic disorders. During the acute stages of the illness amenorrhea is very commonly observed.

Since admission to the hospital the palms of her hands have been cold and have perspired excessively. On this account they are described as being "cold and clammy." Cyanosis is also frequently observed. Her pulse has varied from 90 to 120 with-

<sup>&</sup>lt;sup>7</sup> Allen, E. B. and Henry, G. W.: The relation of menstruation to personality disorders, Amer. J. Psychiat., 13: 239.

out any evidence of the usual organic causes of tachycardia. It is conceivable that these physiological disturbances are an expression of prolonged emotional conflicts but it is probable that there are also serious metabolic disturbances.

Catatonic patients usually maintain postures for long periods of time whether sitting, standing or lying down. This inactivity undoubtedly increases the cyanosis of dependent parts and accentuates the general vegetative dysfunction.

\* \* \* \*

Bessie remained in this hospital for nine months without marked change in her condition. Her general physical health was improved and she was in better contact with her surroundings. She was transferred to another hospital where prolonged treatment could be given. Diagnosis: Schizophrenia. Catatonic Type. Prognosis: Poor for recovery although considerable improvement may be expected.

# CHAPTER XII

# PRINCIPLES OF TREATMENT

One of the most difficult problems with which the psychiatrist is confronted is the treatment of personality disorders. This is due in part to the general attitude toward the mentally sick which is very resistant to change. After centuries of superstition and prejudice regarding the mentally sick it is scarcely to be expected that the general public could be educated to look upon and deal with these disorders just as they would any other kind of illness.

Sometimes the nature of the illness is not recognized and valuable time is lost trying a series of remedies which in the treatment of the particular case may be ineffective or even detrimental. The patient may be sent to the seashore or the mountains, his diet may be changed, he may be advised to take vigorous exercise or to remain in bed or he may even be deprived of his teeth, tonsils, appendix or some other structure before the psychiatrist is consulted. In the meantime the mental illness may have become well established and the chances of a favorable response to psychiatric treatment greatly reduced.

With the increasing facilities for the treatment of personality disorders the physician may have the task of deciding where and by whom the patient should be treated. The nature of the illness may be such that treatment can be given by a psychiatrist in private practice or in a clinic. On the other hand the patient may be suicidal or have other tendencies which require the careful supervision and management afforded by a psychiatric hospital. In this environment his daily interests and activities are kept as near to the normal as is compatible with his condition and at the same time he may receive individual treatment by a psychiatrist. Whatever the decision may be the patient must first have a thorough physical examination. Such treatment as will insure the maximum degree of general good health should then be promptly instituted. This preliminary investigaion should be repeated from time to time so that any change in the patient's physical health may not be overlooked.

The recognition of functional elements in all forms of illness has in recent years greatly widened the scope of psychiatric practice and it has been a factor in the rapid development of preventive treatment. Along with this change has come a rise in the standards of training and experience necessary to qualify for the practice of psychiatry. In order to qualify a physician must have had the general medical training and internship and then several years of postgraduate work in institutional psychiatry.

In spite of the progress made in this direction the majority of the psychiatric patients are first seen by nurses, social workers and general practitioners who suggest simple hygienic measures and recommend further study and treatment by a psychiatrist when it seems desirable. In the larger cities there are a number of psychiatrists engaged in private practice and most of the general hospitals have a psychiatric out-patient service. In addition the state hospitals conduct mental hygiene clinics for patients who cannot afford private treatment.

There is no longer any stigma attached to a person receiving psychiatric treatment and in some circles it has become fashionable to be "psychoanalyzed" regardless of the kind and degree of personality maladjustment. This changed attitude has led to early treatment and the prevention of serious complications which often develop in neglected cases.<sup>1</sup>

In the majority of the cases seen in private practice and in outpatient clinics the disorders presented are reactions to difficult life situations which can be readily understood after a thorough psychiatric investigation has been made. Appropriate and effective treatment may then be instituted. Often this treatment is little more than an application of mental hygiene principles which are adapted to each patient's needs. Subsequent treatment interviews may be necessary to study the effects of treatment and to see that the patient actually coöperates in the treatment. In those cases in

<sup>1</sup> Smith, L. H.: Intensive psychotherapy in a hospital clinic, Amer. Jour. Psychiat., 13: 33.

Smith, K. S.: Practical modes of treatment in handling mental hygiene problems in a university, Amer. Jour. Psychiat., 13:57.

Harrington, M. A.: The mental health problem in the college, Jour. Abn. and Social Psychol., 23:293.

Thom, D. A.: Psychotherapy in private practice, Amer. Jour. Psychiat., 13:77.

which there is an underlying serious personality maladjustment, treatment interviews must be continued daily or several times a week until the patient is again able to deal with his problems.

Only a very small percentage of the cases presented for psychiatric evaluation require treatment as in-patients in a psychiatric hospital. This need is determined by the acuteness of the disorder, the inability of the patient to take care of his own interests and the danger of personal injury, particularly the risk of suicide. In such cases the hospital assumes entire responsibility for the patient and directs the study and treatment of his illness. The coöperation of friends and relatives is necessary and it is desirable to have the patient in sympathy with the efforts made in his behalf. His condition may be such that he cannot fully appreciate the need of treatment or he may only reluctantly follow the advice of others. In any case coercion should be avoided if possible. As a matter of fact it seldom is necessary and in some hospitals more than eighty per cent of the admissions are purely voluntary.

Hospital treatment begins with the application for admission. The friend, relative, or the patient has been confronted with problems difficult to solve or even to comprehend. The physician must gain the confidence of all concerned, giving as much reassurance as the facts may permit and avoiding prognostications which are unlikely to be realized. The hospital should be for the patient an asylum in its real meaning, a place of refuge from the manifold stresses of the every day world.

The physician gets himself oriented in the general setting in which illness has developed by his investigation of the family background. He determines the liabilities and assets of the patient through the personal history and the personality study and he discovers the specific weaknesses and preferred type of reaction of the patient through the history of the present illness. All of his contacts thereafter are primarily therapeutic even though he may be engaged in collecting data for a research problem.

Each patient presents his own peculiar therapeutic needs and these vary from time to time. The physician may be inclined to rely upon some particular form of treatment but he calls upon all possible therapeutic aids. Part of his duties consist of the supervision of the work of his assistants and he adapts the forms of treatment applied in accordance with the condition of the patient.

Through daily visits he keeps himself informed regarding the progress which is being made and with indications for change. Superficial contact is maintained through the routine ward visits but actual knowledge of the patient's condition and trends is maintained only through therapeutic interviews. If the physician really keeps in touch with his patient in this way he can anticipate both thought and action and take steps to divert both into desired channels.

A hospital has the advantage of affording the maximum protection for the patient, of surrounding him with an atmosphere of understanding and helpfulness and of having all therapeutic activities organized and directed by trained assistants. Conditions are ideal for the practice of any form of psychotherapy<sup>2</sup> and some forms can be applied with safety only in a hospital. This is particularly true of the attempts to use psychoanalytic treatment with manic-depressive and schizophrenic patients. The manic-depressive patient is likely to become suicidal during psychoanalytic treatment in the depressed phase and in the manic phase the associations are superficial. Unless the technique is modified and the treatment applied with great care the condition of the schizophrenic patient is likely to be made worse by treatment. Consultation with other members of the staff tends to check undue enthusiasm and to direct it in profitable channels.

While the patient is acutely ill hospital treatment is obligatory but when the period of convalescence is reached there may be difference of opinion as to further therapy. To the family the patient may appear recovered and he may insist upon being released. Experience forces the physician to be conservative in his recommendations but he may have to accept compromise. Sometimes the patient is reluctant to leave a protected environment and occasionally it is advisable to urge departure from the hospital even though the patient is not yet recovered.

Under ideal circumstances there should be a transition period during which the patient gradually resumes his normal mode of living. He may try being away from the hospital for a few hours or during the day, returning at night for observation and such help

<sup>&</sup>lt;sup>2</sup> Diethelm, O.: Investigations with distributive analysis and synthesis, Arch. Neur. and Psychiat., 35:467.

Chapman, R. M.: Psychoanalysis in psychiatric hospitals, Amer. Jour. Psychiat., 91:1093.

as he may need. Later he may be placed on parole or discharged from the in-patient service to continue treatment in an out-patient clinic or with his private physician.

Throughout his hospital residence he follows a daily program outlined by his physician which stimulates interests and requires healthful activities. As the patient recovers he is given more and more opportunity to choose the ways in which he may occupy himself. Many patients develop new interests and some learn new occupations or discover hobbies which greatly aid future adjustment.

This sketchy outline of treatment will now be somewhat amplified through brief presentations of the forms of therapy employed. Methods of treatment are of course best learned from actual practice and little is gained from reading about them except some knowledge and understanding of the methods. All of them are included in hospital treatment but some of them are applied more intensively in private practice. Their value is determined in large part by the skill and experience of the physician who makes use of them.

Psychotherapy. It is the purpose of every psychiatric investigation to ascertain through the family history the inherited tendencies to personality disorders as well as to obtain an accurate knowledge of the influence which members of the family may have exerted upon the patient during his early life. A detailed account of his personal history and of his character traits gives information regarding the extent to which he may have followed the life pattern of his family and discloses his habitual modes of adaptation to his own cravings as well as to environmental influences. The record of the illness describes his failing adaptation to the demands of reality and indicates the direction in which he tends to escape or to seek a compromise. A careful mental examination determines with precision the nature of the patient's attitude, tendencies, conduct, trend of thought, manner of speech and prevailing mood, the extent to which his sensorium and his capacity for reason and orientation are disordered, to what degree his memory and judgment may be defective and finally the nature of his understanding of the illness. With this information the psychiatrist is able to estimate the extent to which environmental influences may be favorably modified. He can then advise the friends and relatives as to the nature of the illness and suggest ways in which they may cooperate in the treatment. He is in a position to choose wisely the methods of treatment which are most suitable for the particular case.

The many forms of psychotherapy which have been found useful in the treatment of personality disorders differ from each other in purpose and value according to the extent to which they (1) modify or remove the causes of the illness, (2) release those tensions which are associated with morbid thought processes, (3) aid the patient in the formation of more healthful habits of adaptation to reality and (4) merely alleviate the symptoms.

The psychiatrist selects methods of therapy according to the indications of the particular case. Adaptations must be made to the needs of each patient at any given stage in his illness. Any single form of therapy is scarcely ever adequate.

As a rule the psychiatrist must have several years of training and experience in a psychiatric hospital before he is in a position to direct therapy. He must be familiar with the theory and practice of the various forms of psychotherapy and he must be able to differentiate between the claims of enthusiastic advocates and the real merits of each method. So much depends upon the personality, interest and experience of the therapist that almost any form of psychotherapy is beneficial when applied skillfully and judiciously. The frequent visits of the psychiatrist, his evident interest in the patient's welfare and the confidence in the physician which the patient manifests by the confession of the most intimate details of his life are very important factors in all forms of psychotherapy. When the treatment is successful the patient feels that at last he has found someone who really understands his difficulties and whose only purpose is to assist him on his lonely road back to health.

Among the more common forms of psychotherapy are psychoanalysis, suggestion, hypnotism, persuasion and reeducation. Important adjuvants in therapy such as occupational therapy, physical education and various forms of physiotherapy are employed in all of the higher grade psychiatric hospitals. These methods of treatment will be described in sufficient detail to outline their character and to disclose their underlying principles.

Psychoanalysis. Among the many pupils of Charcot were two who have made outstanding contributions to psychiatric knowledge. Stimulated by suggestions made during the course of his lectures on traumatic neurosis they developed new theories regarding the nature of the psychoneuroses as well as new methods of therapy. One of them, Janet, called his method psychological analysis and the other, Freud, elaborated a very complicated method of investigation

and treatment which he termed psychoanalysis.<sup>3</sup> They soon differed on the rôle played by the sexual life in the causation of psychoneurotic disorders and their viewpoints on this question have continued to diverge.<sup>4</sup>

While associated with Breuer in studying cases of hysteria Freud made observations which led him to the conclusion that the symptoms of hysteria were disguised expressions of childhood memories which because of their painful content had been forced out of consciousness. These memories were of sexual experiences so shocking to the patient's conscience that they could survive only in the unconscious. The large element of pleasure in these experiences along with the persistent urge for some form of sexual gratification not only kept these memories alive but caused them to burst into consciousness greatly transformed and under the guise of hysterical symptoms. Partial gratification was obtained thereby and usually at a time of great stress when the patient's conscious control was impaired.

In the course of their studies they observed that if the patient was encouraged to discuss freely these early memories the hysterical symptoms tended to disappear. The ability to recall these memories varied greatly and in the beginning Freud employed hypnosis to assist the patient in reviving them. He soon abandoned the use of hypnosis, however, because there were many patients whom he was unable to hypnotize. In addition he discovered that if the patient freely discussed early memories and at the same time gave full expression to the accompanying feelings hypnosis was unnecessary. This attempt to assist the patient to revive painful memories and to re-live early scenes for the purpose of giving expression to the associated emotions was referred to as the cathartic method of treatment. The verbal expression of repressed memories highly charged with emotion (complexes) was called ab-reaction.<sup>5</sup>

These early experiences with psychoanalysis were published in 1895. By 1900 Freud had given up the cathartic method because it was inadequate and dealt chiefly with symptoms. He had also come

<sup>&</sup>lt;sup>3</sup> Freud, S.: The history of the psychoanalytic movement, Psychoanalytic Rev., 3:406.

<sup>&</sup>lt;sup>4</sup> Janet, P.: Psychological Healing, A Historical and Clinical Study, N. Y., 1925, Vol. I, pp. 600-602.

<sup>&</sup>lt;sup>5</sup> Freud, S.: Selected Papers on Hysteria and Other Psychoneuroses, New York, 1909.

to the conclusion that most of the childhood traumatic emotional experiences were fanciful. Subsequent experience has led to further elaboration of psychoanalytic theory and to refinements in the technique of investigation and therapy.

It is now the aim of the analyst to make the patient conscious of his repressed instinctive tendencies so that he may deal with them directly in his adaptations to reality. During the analysis the rôle of the dominant parent, or in other words the super-ego of the patient, is imposed upon the analyst. The prohibitions and standards imposed in childhood by parents or their substitutes can thus be dealt with objectively. Early scenes and intimate personal relationships are re-lived with free expression of the accompanying emotional experiences. When the patient has thus become aware of the fundamental libidinous tendencies which previously had been repressed the analyst gradually withdraws from the situation. This requires that the patient reconstruct his mode of adaptation taking into consideration his real desires as well as the demands of the environment. It is presumed that his life may then be directed in accordance with deliberate choice rather than by a code which may have been useful in childhood but which is unsuitable for adult life. The pathways by which unconscious desires seek gratification become direct and under the supervision of the ego. The indirect gratification in the form of symptoms is no longer necessarv.6

For many years the orthodox Freudian psychoanalysis has been governed by certain general principles which distinguish it from other forms of psychoanalysis. As far as possible the Freudian is strictly passive in his relationship to the patient. He sits at the head of a couch upon which the patient lies. In this position he can observe the patient and at the same time be out of sight. It is understood that the patient will disclose all thoughts or feelings as they come to his attention, however trivial, fanciful, personal or unpleasant they may be. This mental process soon resolves itself into a kind of thinking or drifting such as occurs in day dreaming. The content of the unconscious is thus obtained by what is called free association.

In spite of the fact that the relationship between the patient and

<sup>&</sup>lt;sup>6</sup> Alexander, F.: A metapsychological description of the process of cure, Internat. J. Psychoanalysis, 6:13.

the analyst must remain strictly professional throughout the analysis the very nature of the confessions requires that unusual confidence be placed in the analyst. Furthermore as the patient begins to revive memories of the affectionate relationships of childhood he also begins to identify the analyst with the father or mother or some other loved person. In this way is established a strong emotional relationship which is called *transference*. As a rule there is a feeling of great affection for the analyst and under such circumstances the transference is said to be positive. There are times, however, when there is a strong feeling of aversion or antagonism and the transference is then said to be negative.

The establishment of a transference is essential so that the patient may find an outlet for his feelings or desires through the analyst rather than by means of the symptoms of the illness. As the patient becomes more and more involved in the re-living of highly emotional experiences through the sequence of associations he eventually gives expression to repressed memories of his childhood or even of his infancy. In this way the strong emotional tendencies which dominate the patient's life and are manifested by reactions which are out of all proportion to the apparent causes are traced to their origins in the unconscious. The patient thus gains an understanding of the source of his conflicts and with the release of tension associated with desires forbidden and repressed by the super-ego he is free to begin the adaptation to reality in a more rational manner.

The approach to the unconscious by means of free association is often facilitated by means of dream analysis. Dreams are manifestations of the unconscious which enter consciousness to some extent because of interference with profound sleep. This interference may be physical discomfort, worry or any disturbing influence. In general, dreams represent repressed longings which cannot obtain frank expression during wakefulness. Even in dreams there are always more or less distortion and disguise in the expression of the long ings in order that they may be more acceptable to the super-ego.

Sometimes the repressed longings manifested in dreams are rather obvious. This was the case with a prudish girl, twenty-two years of age, who had continued to be dependent upon her mother. Her sex training and knowledge are indicated by the fact that her mother told her that children "came out of the head of a cabbage," and by the obsessive fear that she was pregnant although she was still a

virgin. When questioned about sex habits she said the sexual problem had not worried her. Excerpts of some of her dreams are as follows:

"I dreamed I was at a dance and it seems that someone lassoed another girl and myself. We got out and mother was watching me and she said she did not want to see me again with her. I had to sit next to her and knit while the others were dancing."

"I dreamed that I was coming along the street and two men grabbed me. I broke away but one of then chased me for blocks...I went to my brother's home and found that he had divorced his wife, and had married some ugly old woman. I...took his baby and ran home with it. I told them...I would keep his baby."

"I dreamed...they scolded me at home about hugging some man..."

"I dreamed . . . in the convent grounds . . . some man chased me around . . . "

"I dreamed...a colored man came along... I was frightened and ran upstairs where it seemed everyone was picking out shoes. I went to pick up a pair and instead I picked up a velvet case filled with Tiffany wedding rings. Just then a lady whom I knew brought up a very pretty baby and told me that was what she picked out."

As this patient's life was studied in detail her home life was found to be most unpleasant. She was not even permitted to go out with girls. Her parents felt that children were created to support them and allowed her fifty cents per week for spending money, keeping the remainder of her salary for themselves. She was much humiliated by the ill-fitting clothes she had to wear and lived in fantasies of being rich and having pretty clothes. In one of her dreams she was "some place where everyone was dressed in new spring clothes and they told me I was to have some too." In spite of her statement "the sexual problem has not worried me," she later admitted that she had looked forward to marriage and a family. She confessed that she had practised self abuse for several years. her dreams many of her longings obtained frank expression and gratification. She was pursued by several men, hugged one of them, attended dances, and obtained pretty clothing, wedding rings and a baby.

Unless the symptoms have organic basis the analyst continues his passive rôle and makes no comment upon the patient's complaints. Neither does the analyst undertake to give advice or to participate in any consideration which is not directly related to the analysis. He even does not give encouragement to the patient.

Throughout the analysis there is more or less resistance to the exposure of the content of the unconscious. The patient may protest that he longs for health and that he is making every effort to regain it and yet he clings to his symptoms rather than attempt another form of adaptation. Resistance may display itself through inability to associate freely, by exaggerated criticism or skepticism, by attempts to discuss some aspect of the analysis in an objective way and even by an apparent rapid recovery. Resistance may seriously delay the course of the analysis and occasionally when no progress can be made the treatment must be discontinued.

It might appear from this rather simplified presentation that psychoanalysis could be practised without much special training and that its effect upon the patient, if not beneficial, would at least be innocuous. Experience has shown that the opposite is nearer the truth.7 In recent years psychoanalytic societies have established as a minimum requirement for practice that the analyst himself must be completely analyzed and must do control analyses with an experienced and qualified analyst, i.e., he must demonstrate his proficiency by conducting analyses under supervision. An orthodox Freudian analysis is seldom finished in less than a year and there are many analysts who are not thus qualified. On the other hand the patients must be selected with great care as a large proportion of those who apply are not suitable for this method of treatment. In general it has been found that the psychotic, the mentally deficient or the aged do not respond favorably to psychoanalytic therapy. In all cases the patient must be willing and able to cooperate in the treatment until it is completed. An analysis interrupted usually leaves the patient in worse condition than before it was started. is left in the uncomfortable state of positive transference and with only a little knowledge of the painful aspects of his personality which hitherto he had repressed.

As far as the practice of psychiatry is concerned psychoanalysis has proven itself an excellent method of clinical investigation and it has contributed more to our knowledge of the personality forces,

<sup>&</sup>lt;sup>7</sup> Alexander, F.: Schizophrenic psychoses. Critical considerations of psychoanalytic treatment, Arch. Neurol. and Psychiat., 26:815.

chiefly unconscious, which determine human relationships, than any other form of investigation.

As a method of therapy it is still in an experimental stage. The most favorable results have been obtained in the treatment of the psychoneuroses although compulsive neurotic patients are often less amenable than some of the psychotic. It is unfortunate that practically all of the psychoanalysts are engaged in private practice and as a consequence the attempts at treatment of the psychoses have been sporadic and not subject to the control of experienced psychiatrists. In the past few years psychoanalysts have been added to the staffs of psychiatric hospitals and the reports of their work give promise that psychiatric practice may become more precise, scientific and effective.8 Unless the technique of psychoanalysis can be radically modified, however, it is difficult to conceive of its being a practical method of therapy. More than half of the psychotic patients are totally incapable of cooperating in this treatment. In addition not more than eight patients per year can be treated according to orthodox procedures by one analyst. In public hospitals one psychiatrist has from two to three hundred patients under his care and there is no indication that society will lessen his responsibilities.9

Jungian psychoanalysis. Among several of the early followers of Freud who have differed with him and who have withdrawn from or been forced out of the orthodox analytic group was the founder of another form of psychoanalysis, C. G. Jung of the University of Zürich. In 1913 they parted "without feeling the need to meet again" and since then there has been an active warfare between the two schools as well as an increasing divergence in theory and practice. The Freudians have tended to emphasize the sexual element in practically all human interests and activities while the Jungians have gradually repudiated this pansexuality.<sup>10</sup>

Freud has described the unconscious as predominantly infantile,

<sup>&</sup>lt;sup>8</sup> Zilboorg, G.: The dynamics of schizophrenic reactions related to pregnancy and childbirth, Amer. J. Psychiat., 8:733.

<sup>&</sup>lt;sup>9</sup> Peck, M. W.: The meaning of psychoanalysis, Mental Hygiene, 13: 309. Glover, E.: Lectures on technique in psycho-analysis, Internat. Jour. Psycho-analysis, 8: 486; 9:7, 181.

<sup>&</sup>lt;sup>10</sup> Jung, C. G.: The theory of psychoanalysis, Psychoanalytic Rev., 1: 1, 153, 260, 415; 2: 29, 241.

a region in which pleasure reigns supreme, where forbidden desires may continue to seek gratification in dreams or psychoses, in artistic productions, in slips of the tongue or at those times when the vigilance of conscience is relaxed. Jung deals with a personal unconscious which harbors the repressed desires of the individual and also with a collective unconscious in which is preserved the experience of the race. The collective unconscious is inhabited by divinities, saviors, magical beings and other strange powers, called archetypes whose activities dominate the fanciful world as expressed in mythology, folklore, dreams and psychoses. In a more general sense archetypes are instinctive tendencies or racial dispositions to fantastic constructions.<sup>11</sup>

The tendency in Freudian analysis is to reduce all mental life to elementary sexual strivings in the unconscious. The Jungians are more ambitious in that they attempt to make use of constructions of the unconscious as indications of ways in which new adaptations to reality may be attempted. To the Freudians a dream is a wish fulfillment while to the Jungians it is also a symbolic construction representing an attempt at a solution of personal problems and indicating the goals toward which the individual is striving. It corresponds to the prelogical stage in mental development still observed in primitive people.

Jung ascribes the predominant sexual element in the transference of a Freudian analysis to the physician's own attitude. In his own analyses he claims that the transference is merely a psychological relationship. While in the stage of transference the patient feels that the analyst may exercise the power of a god or a demon in bringing about a solution of personal problems.

An orthodox Freudian strives to maintain a passive rôle so that the patient himself may discover the sources of his conflicts and thus be relieved of uncontrollable tension. When this is accomplished it is presumed that the patient is no longer in need of a transference and is in a position to attempt a more healthy adaptation to reality. When this readjustment takes place the analysis is said to be finished.

A Jungian strives to interpret the fantasies and dreams of the patient with the aid of clues obtained from symbolic representations in folk-lore, mythology, religion and in all artistic productions.

<sup>&</sup>lt;sup>11</sup> Jung, C. G.: Contributions to Analytical Psychology, N. Y., 1928.

With the suggestions from the patient's unconscious the analyst calls attention to ways in which a better adaptation to reality may be achieved. He not only acquaints the patient with his numerous potentialities but also presents to him the ever widening vistas of self realization. A Jungian psychoanalysis is therefore never completed.

The Freudians criticize this form of psychoanalysis as being unscientific and mystical. They state that the Jungian transference and the active rôle played in the attempts at psychosynthesis create a permanent state of dependence upon the analyst. In their comparatively modest therapeutic efforts the Freudians seek merely to associate present phenomena with experiences of the past, and they look upon the Jungian anticipation of the future as the prerogative of the deity.<sup>12</sup>

Individual psychology. A few years before Jung departed from the ranks of the orthodox psychoanalysts Freud was obliged to bring about the resignation of Alfred Adler because of "irreconcilable scientific antagonisms." Very soon after this Adler disclaimed any adherence to psychoanalytic principles and announced the formation of the school of Individual Psychology. The teachings of Adler have little relation, other than historical, to psychoanalysis but he has expressed certain conceptions which have practical value to psychiatry.

Adler first called attention to deficiency in the structure or function of parts of the body as a basis for a feeling of inferiority. Such a deficiency causes the child to struggle desperately to overcome his inadequacy. Whatever success he may achieve gives basis for the more comfortable feeling of superiority. It was this motive which changed the stuttering Demosthenes into an orator.

To the group of organically defective children he added the spoiled and hated children. The spoiled child felt inferior because he could not readily adapt himself to the lack of indulgences outside of the family circle. His goal in life was to maintain the old and familiar relationships. The hated child, i.e., illegitimate or not wanted, converted his feeling of inferiority into a hostile attitude, a tendency to cruelty and a desire to suppress others. Adler emphasized the

<sup>&</sup>lt;sup>12</sup> Baynes, H. G.: Freud versus Jung, Brit. Jour. Med. Psychol., 8: 14. Rickman, J.: On some of the standpoints of Freud and Jung, Brit. Jour. Med. Psychol., 8: 44.

fact that all persons strive for a goal of superiority but those who feel inferior may struggle desperately. If in the presence of a new situation they lack courage and fail, they tend in the direction of criminality, neuroses or suicide. The first few years of life are most important since the pattern or style of life is already formed before the age of five.<sup>13</sup>

To these formulations was added the conception of masculine protest. By this is meant a striving for power which is dependent upon the proportion of masculine and feminine tendencies within the personality. If the man feels inferior because of excessive feminine traits he may compensate by a morbid striving for strength, riches or knowledge. He may feel compelled to demonstrate his virility by physical violence or sexual excesses. If a woman has excessive masculine traits she may find it difficult to play a gentle, submissive rôle and instead strives to be as much like a man as is possible.

An index of the degree of instability is found in the distance between the patient's innate capacities and the goal he has established for himself. As he fails to attain this goal he begins to enter the realm of fancy and to behave as if he were strong enough to reach his ideal.<sup>14</sup>

Adler has suggested that the development of a morbid feeling of inferiority may be prevented or kept to a minimum degree if the parents lessen the family egoism, avoid spoiling their children, give them as much affectionate attention as is proper and give them as soon as possible the benefit of a broader social environment than that of the home. If the morale of the individual is already undermined by a feeling of inferiority efforts should be directed toward reestablishing his courage.

The views of both Adler and Jung have been severely criticized by the Freudians as being founded upon unscientific principles, lacking the support of clinical observation and as compromises with the truth regarding the rôle played by the sex instinct. Freud himself has been intolerant of them and along with many other similar remarks he suggests that the psychology of Jung may have been in-

<sup>&</sup>lt;sup>13</sup> Adler, Alfred: Individual Psychology, Jour. Abn. and Soc. Psychol., 22: 116.

<sup>&</sup>lt;sup>14</sup> Vaughan, W. F.: The psychology of Alfred Adler, Jour. Abn. Psychol., 21:358.

fluenced by the theological history of so many of the Swiss workers while that of Adler may have had its origin in his socialistic record. Freud has permitted us to draw our own conclusions regarding the source of his psychology.<sup>15</sup>

Both Jung and Adler have protested against the large sexual element in psychoanalysis. Their views were welcomed by the opponents of Freud. Freud nevertheless seemed to thrive on opposition. His attitude toward the criticism of his theories is expressed in the following characteristic remark on the defection of Adler and Jung: "I can only conclude with the wish that the fates may prepare an easy ascension for those who found their sojourn in the underworld of psychoanalysis uncomfortable. May it be vouchsafed to the others to bring to a happy conclusion their works in the deep."

It is still too soon to arrive at any final conclusion regarding the relative merits of the work of Freud, Jung and Adler. In general it appears that each is emphasizing a particular aspect of the same problem. Freud is interested chiefly in the repressed desires of the unconscious, Jung in the racial unconscious and Adler in the strivings of the ego. Thus far psychoanalytic theory and practice have been subject to frequent change and there is no indication at present that either has become stabilized. For many years psychiatrists have made practical application of the principles of psychoanalysis and they undoubtedly will continue to do so as far as their experience and judgment permit.

Suggestion. Suggestion is the oldest and most widely used method of treatment. Before the time of Hippocrates the ancient Greek priest-physicians covered the walls of their temples of healing with testimonials from those who had been cured. Nothing was omitted which might suggest the magical power of the healers. In the middle ages people continued to ward off sickness and evil spirits by means of charms and amulets. Healing was obtained by royal touch, through sacred relics and by means of the exorcisms of the clergy and the concoctions of the alchemists. Miraculous cures will always be plentiful as long as a large proportion of the people remain highly suggestible or just gullible.

<sup>&</sup>lt;sup>15</sup> Jung, C. G.: Sigmund Freud in his historical setting, Character and Personality, 1:48.

<sup>&</sup>lt;sup>16</sup> Freud, S.: The history of the psychoanalytic movement, Psychoanalytic Rev., 3: 454.

It is impossible to eliminate suggestion from any form of treatment and it is doubtful whether it would be advantageous to do so even if it were possible. Even psychoanalysis contains a large element of suggestion despite its claims to the contrary. In the stage of positive transference the patient is as ready to participate in the wish fulfillment of the analyst as he would be in a state of hypnosis. Physicians, nurses, relatives and friends are constantly making application of this form of therapy. An attitude of cheerfulness and optimism is assumed by all whether or not the condition warrants it. The patient's attention is called to the indications of a favorable outcome and the unfavorable symptoms are either not mentioned or minimized.

Suggestion is especially desirable in the treatment of the mentally sick because they are so prone to follow one trend of thought or to be governed by some prevailing mood. Without the aid of others it is very difficult for them to consider any other viewpoint than the one with which they are preoccupied. Very often the patient is placed in a new environment which is not only pleasing but calculated to stimulate new interests in reality.

The benefit which may be derived from suggestion is dependent upon many variables. Experience leads to a degree of refinement in the application of suggestive therapy which is really a fine art. At all times it must be used with discretion. It must be remembered that children and people of little training and experience are more suggestible than mature adults. Suggestibility is also dependent upon the relative knowledge of the persons involved and especially upon the prestige of the therapist. The physician's personality and reputation are most important factors. All propaganda relative to the cures by the distinguished makes use of this fact.

It is well known that much of the medicinal and surgical treatment owes its beneficial effect to the element of suggestion. Moreover psychiatrists are often compelled to prescribe medication so that they may obtain the coöperation of their patients in more important therapeutic efforts. The tradition of medical and surgical procedures is so firmly established that even the most enlightened patient feels that something is lacking when the treatment is purely psychotherapeutic.

Hypnotism. As a rule the treatment by suggestion is given while the patient is awake but it is sometimes employed during sleep.

In whatever way it may be used its effectiveness depends upon the degree of rapport which is established with the patient's unconscious. This contact is obtained in maximum degree during a state of hypnosis. In this state conscious resistance is reduced to a minimum and the patient is subject to the control of the hypnotist.

Many theories<sup>17</sup> have been propounded regarding the nature of hypnosis but one of the most plausible has been offered by psychoanalysts. According to their formulations hypnosis is a state in which infantile incestuous desires become directed toward the operator. The object of these desires was the father but since infancy the desires have been repressed in the unconscious. During the hypnotic state the conscious inhibitions are held in abeyance and the hypnotizer in playing the rôle of the father becomes the object of the incestuous desires.<sup>18</sup>

The details of the technique employed vary considerably but there are certain principles which are almost universally followed. The patient must relax as much as possible and for this purpose the recumbent posture is chosen. After the patient has been enlightened by a brief statement of the nature and purpose of hypnosis an appeal is made to his suggestibility. He is requested to listen attentively and without resistance to the words of the hypnotist who suggests the approach of a state of repose resembling sleep. Dissociation is facilitated by having the patient concentrate his attention upon some object or upon a steady and monotonous stimulus until a feeling of fatigue ensues. The hypnotic state is finally induced through the physician's recitation of a formula such as the following: "Your eyelids are becoming heavier and heavier, you are getting tired, dull, and more and more sleepy. Everything becomes obscure before your eyes. You can no longer keep your eyes open. You are in a condition of absolute, complete repose. You are breathing calmly, deeply and uniformly. You feel you are going to sleep."19

Three different stages in the hypnotic state have been described. When somnolence alone is induced the patient can resist suggestion and can open his eyes. If he has reached the stage of light slumber

<sup>&</sup>lt;sup>17</sup> Rothenberg, S.: Theories of hypnosis and its use, N. Y. State Jour. Med., 28:372.

<sup>&</sup>lt;sup>18</sup> Jones, E.: Papers on Psychoanalysis, N. Y., 1919, p. 21.

Prince, M.: Suggestive repersonalization, Arch. Neurol. and Psychiat., 18:159.

<sup>19</sup> Schilder, P. and Kauders, O.: Hypnosis, N. Y., 1927, p. 81.

he is obliged to comply with at least some of the suggestions. It is generally agreed that the milder states of hypnosis have much more value for psychotherapeutic purposes.<sup>20</sup> In the state of profound sleep or somnambulism there may be complete amnesia. As a rule the hypnotic state becomes more profound as the experience is repeated. When only the first stage is induced it may terminate spontaneously as soon as the operator leaves the patient. All stages of hypnosis may be terminated artificially by physical stimulation such as rubbing the eyelids and eyebrows or sprinkling cold water on the face. More often consciousness is regained on the suggestion or the command of the hypnotizer either immediately or at some specified time.

Prior to the discovery of anesthetics hypnosis was occasionally employed to induce anesthesia during surgical operations. However the uncertainty in the induction of the necessary degree of hypnosis prevented its more general use for this purpose.

Hypnosis has been employed to relieve pain and to obtain better coöperation in the treatment of physical illnesses. This must be done with great caution since with the alteration of the symptoms grave physical disease may be overlooked.

The chief indications for hypnotic therapy have been the presence of psychoneurotic disorders and particularly hysteria. Such conditions as hysterical paralyses, contractures, astasia-abasia, blindness, aphonia and amnesia may respond promptly to hypnotic therapy especially when it is applied soon after the conditions appears. Suggestion as to the desired change given during the hypnotic state is carried into effect with the return of consciousness. Prompt relief from these symptoms is desirable in order to lessen the chances of the hysterical reaction becoming habitual. More intensive treatment of the underlying conflicts may then be instituted after the relief of the acute symptoms.

Hypnotism has suffered the fate of all methods of therapy which have been associated with charlatanism and which have been hailed with undue enthusiasm. It is really an outgrowth of magnetism and mesmerism. For about ten years following its revival in France it was employed indiscriminately and with great enthusiasm. A few staunch supporters have continued to advocate its use but with

<sup>&</sup>lt;sup>20</sup> Raeder, O. J.: Hypnosis and allied forms of suggestion in practical psychotherapy, Amer. Jour. Psychiat., 13:69.

the ascendancy of psychoanalysis the practice of hypnotism has been neglected.

Opponents of hypnosis have claimed that its continued use may cause the patient to become hypersuggestible and less capable of distinguishing between reality and unreality and that the tendency to drift into unreality is therefore increased. These objections appear to be an outgrowth of superstition and an expression of apprehension. There is little evidence that hypnosis has such detrimental effects.<sup>21</sup>

When hypnosis was more widely used and particularly by charlatans the occasional accusations of malpractice brought the method into some disrepute. It has lost favor however chiefly because it deals with symptoms rather than with causes and the results of treatment are therefore likely to be temporary.<sup>22</sup>

Persuasion. This form of therapy is in many respects similar to suggestion. Explanations and assurances are given in a way calculated to lead the patient to the conclusion that there is no logical basis for his symptoms. This method was most highly developed by Dubois,<sup>23</sup> and it represents a protest against suggestion, organotherapy, surgery and many other therapeutic methods whose value at times has been over emphasized.

Dubois aimed to attack certain personality disorders by means of "encouraging conversation" alone. He aimed to restore the patient to self mastery. By means of long and painstaking discussion he would persuade the hypochondriacal patient that there was no real lesion in the stomach. He would insist upon a recognition of the progress that had been made toward recovery and even exaggerate it in order to encourage the patient. He called attention to the fact that worries are more easily dismissed by trying to lighten the burdens of others.<sup>24</sup> Through persuasion he hoped that the patient might gain a better understanding of himself while with suggestion the most that could be expected was a belief erected upon insecure foundation.

<sup>&</sup>lt;sup>21</sup> Erickson, M. H.: Possible detrimental effects of experimental hypnosis, Jour. Abn. and Social Psychol., 27: 321.

<sup>&</sup>lt;sup>22</sup> Bramwell, J. M.: Hypnotism. Its History, Theory and Practice, Philadelphia, 1930.

Janet, P.: Psychological Healing, N. Y., 1925, 1:151.

<sup>&</sup>lt;sup>23</sup> Dubois, P.: The Psychic Treatment of Nervous Disorders, N. Y., 1909.

<sup>&</sup>lt;sup>24</sup> Janet, P.: Op. cit., pp. 98-147.

Unfortunately most of the illnesses which the psychiatrist must treat have their origin in emotional and instinctive difficulties rather than in errors of reasoning and this form of therapy is therefore largely palliative. It deals chiefly with the conscious factors in the illness and in this respect it is in marked contrast to psychoanalytic therapy. It is a most practical form of therapy and one which all physicians use in their daily visits with patients.

When the psychiatrist is required to interview large numbers of patients he may not be able to go far beyond the limits of this form of therapy. It is well known that whatever the illness may be there are times when the greatest need is another human being to whom we may tell our troubles and especially one who is in a position to give us some assurance. No one is in greater need of such a friend than the patient who is unable to think clearly or whose disordered emotions inevitably lead to a morbid viewpoint.

Reeducation. This term has been applied to somewhat diverse methods of therapy. Originally it included only those efforts directed toward retraining parts of the body and of the nervous system to perform the functions of parts which had become inactive through some destructive lesion of the nervous system. A few decades ago the conception of reeducation or readaptation was extended to the treatment of personality disorders.<sup>25</sup>

In a general way all forms of psychotherapy include a certain amount of training in readaptation calculated to make the solution of personal problems less difficult. The Freudian psychoanalysts are inclined to represent that no further supervision or guidance is necessary after the completion of the analysis. It is of course contrary to all human experience that anyone ever attains such a degree of excellence that no further aid from others is necessary. The Jungian psychoanalysts take the opposite viewpoint that an analysis is never completed and that there are no limits to personality development.

Psychiatric experience indicates that an intermediate course is more practical as well as more in accord with the facts of human strivings and failures.

<sup>25</sup> Prince, M.: The educational treatment of neurasthenia and certain hysterical states, Boston Med. and Surg. Jour., 139:332.

Taylor, W. S.: Morton Prince and Abnormal Psychology, N. Y., 1928, pp. 66-79.

In any case the psychiatrist must have a thorough grasp of the patient's history and as thorough an understanding of the patient's conflicts as is possible to obtain. The illness is the climax of a long period of maladaptation to the demands of reality. If the patient does not become aware of some of the more important sources of his failure one attack may predispose to another since the road leading to an escape from life's problems has already been traversed.

At no time during the treatment is the psychiatrist in greater need of experience and the capacity to exercise good judgment than when the patient begins to take steps in the direction of a readjustment. Some patients have sufficient resilience to recover from an intimate inspection of their fundamental desires and motives while others owe their salvation to constructions which tend to shield them from a knowledge of the origins of their sublimations. In this respect human beings resemble houses. Some may be greatly improved through alterations in fundamental structures while others permit refinements in the superstructure only or perhaps merely such attention as will preserve the best that remains intact. The manner and extent of reeducation which may be wisely undertaken varies in each case according to the resources, potentialities and actual condition of the patient at any given time. Much depends upon the patient's desire for help although the psychiatrist is often confronted with the task of accomplishing his purpose by means of subtle therapeutic procedures and without the cooperation of the patient.

Even when the patient appears to have recovered his health the need for psychiatric guidance and supervision may continue. As a rule the patient is sheltered during the illness from the stresses to which he is ordinarily subjected. Sometimes a return to the old scenes of discord is unavoidable and the patient may need help now and then however much an analysis of his personal problems may have afforded him a new orientation to life. It is desirable that the transition from an environment of most tender care to the world of hardship and responsibility should be gradual so that both the psychiatrist and the patient may have opportunity to anticipate those obstacles which might cause a relapse.

Medication. Except for purely physical complications the indications for medicinal treatment are exceedingly rare. The usual treatment of a physical illness seldom has to be modified because of an accompanying personality disorder. Those psychoses due to

syphilis are treated medicinally in essentially the same way as syphilis in general, with the addition that the medicinal agents are often introduced directly into the spinal fluid. Sedatives are occasionally given in emergencies and to extremely restless and agitated patients, when all other forms of therapy fail. Hypnotics are occasionally employed to aid sleep. Except in the few cases associated with endocrine disorder ductless gland therapy is still in an experimental stage. The treatment by means of insulin shock is an application of the general principle that any profound physiological disturbance, such as that accompanying serious physical illness, may interrupt and favorably alter the course of a psychotic condition. Probably much of the benefit derived from this therapy is due to the enthusiasm of its advocates. Tonics and laxatives are indicated much in the same way as in the general practice of medicine. Except in syphilitic psychoses no medicinal treatment has ever had any consistent specific action.

In recent years medicinal therapy has been employed with some success in the treatment of excited patients and of stuporous patients. In most of such cases the improvement is temporary. A period of narcosis may be necessary, however, to give an excited patient some respite from his continuous overactivity and to prevent death from exhaustion. The treatment of stuporous conditions is still in an experimental stage. It is part of a study of the physiological basis of stuporous reactions.<sup>26</sup>

Surgery. At various times rather striking results have been claimed by persons who have become enthusiastic about surgical treatment. Usually these claims have been made by surgeons who have had limited acquaintance with the nature and course of various psychoses. Few parts of the body which are capable of removal or modification have escaped surgical attention although experience has shown that much of this surgical treatment is unnecessary and unwarranted. Nevertheless it is a fundamental principle of all forms of treatment that the physical health of the patient receives first attention so that it may at all times be at its best. Except in

<sup>&</sup>lt;sup>26</sup> Palmer, H. D. and Paine, A. L.: Prolonged narcosis as therapy in the psychoses, Amer. Jour. Psychiat., 12: 143.

Bohn, R. W.: Sodium amytal narcosis as a therapeutic aid in psychiatry, Psychiat. Quart., 6:301.

Langenstrass, K. H.: Treatment of stupor, Amer. Jour. Psychiat., 11: 447. D'Elseaux, F. C. and Solomon, H. C.: Use of carbon dioxide mixtures in stupors occurring in psychoses, Arch. Neurol. and Psychiat., 29: 213.

emergencies a condition which may require a surgical operation should have the consideration of an internist and a psychiatrist as well as that of the surgeon.

Other important forms of therapy may be applied satisfactorily under the supervision of a psychiatrist. Some of the more common of these will be described in some detail in the following paragraphs.

Intellectual diversion. The direction of conscious or intellectual activities through conversation, discussion, study and reading for the purpose of diverting the patient from morbid preoccupations to the interests of the external world is a method of therapy which is prone to be neglected.

We could learn much regarding this form of treatment even from the ancient Greeks. Celsus suggested that cultured persons be employed to read to his patients. The reading should be correct in manner and with proper accentuation but if this failed to arouse the interest of the patient inaccuracies should be introduced so that the critical judgment would be stimulated.<sup>27</sup> Other Greek physicians advised study of writings containing errors, asking the patient many questions. During convalescence he should be entertained by the narrations of orators and by the discussions of philosophers.

These and many other valuable suggestions have been followed now and then throughout the intervening centuries but such therapy has never been thoroughly studied or systematically employed. A large proportion of the mentally ill could thus be profitably occupied and many tedious hours and days spent by the better educated patients could be avoided.

In recent years the value of reading facilities has been somewhat better appreciated. Libraries to which patients have access have been established in hospitals and an effort has been made to select books and periodicals which are suitable for the diversional therapy of the mentally ill. Many of the patients are unable to come to the library and their needs are served by having the books brought to the wards or cottages. In order to accomplish the purpose of such a library it is necessary to have the service of a specially qualified librarian who is genuinely interested in the patients and their problems.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> Pinel, C.: Du traitement de l'aliénation mentale aiguë en général, Paris, 1856, p. 4.

<sup>&</sup>lt;sup>28</sup> Russell, W. L.: The library in the modern hospital, The Library Journal, December 15, 1924.

The librarian must have special knowledge and training in regard to personality disorders in order to serve in a hospital for the mentally ill. In the selection of books she cannot depend upon their literary merit or their popularity but must choose those which have therapeutic value. They should present a cheerful outlook and should stimulate renewed interest. In some institutions the books must be distinctly educational. Those which dwell upon sex, religion, suicide or mental illness should be avoided. A few exceptions are found in books written by former patients whose autobiographical accounts lend encouragement to those similarly affected. Depressed patients usually prefer light reading and they are likely to be discouraged or fatigued by a large volume. Many select books which are bound in bright and attractive cloth, regardless of the authors or titles. Books must be selected according to the intellectual and cultural interests of the patients and to serve them at all stages of illness. In like manner the newspapers and magazines for patients need to be scrutinized. Both contain many suggestions as to how to commit suicide as well as many other undesirable references.

It is equally important to try to divert and entertain these patients by means of various forms of amusements such as moving pictures, dramatics,<sup>29</sup> musicales and card games. All of such therapy should be under the direction of a psychiatrist who is capable of maintaining his interest in this work over a long period of time. The need which any community has for diversion and entertainment is even greater in a community of the mentally disordered.

Music. Although music has been employed in the treatment of mental illness since prehistoric times its use as a therapeutic agent has never been scientifically studied. A response to music is a universal human reaction regardless of previous training or the intelligence level. Young children, the feeble-minded and primitive people are interested primarily in rhythm. The artist and those who comprehend his work find music to be one of the most satisfying means of personality expression. The artist strives to give full expression to his feelings in his own creations or in the reproduction of the works of others. The listener also finds an outlet for his own feelings even when he appears to be merely applauding someone else.

<sup>&</sup>lt;sup>29</sup> Noble, T. D.: The use of dramatics and stage craft in the occupational treatment of mentally ill patients, Occupational Therapy and Rehabilitation, 12:73.

As the form of musical expression becomes complex the individual response is increasingly varied and unpredictable. This appears to be due to the complexity of the stimuli and to the emotional associations aroused by these stimuli. Unfortunately some of the associations are so painful and disturbing that their revival is undesirable. Some musical experiences may facilitate a morbid retreat from reality and some may prove too exciting. The need of adapting music to individual response is therefore just as great as with other forms of psychotherapy.

In spite of these personal reactions to music much can be accomplished through group treatment and there is probably no institution for the mentally ill, the feeble-minded or for criminals which does not make practical application of music in the care of its inmates.

Its usefulness is so generally accepted that very few physicians have been stimulated to participate in a scientific evaluation of it.

The physician must participate in this form of treatment in order to make it effective. He alone is sufficiently acquainted with his patients to correlate the efforts of a music director with their responses. He must help to select groups of patients according to the type of musical expression to be employed and he must study the reactions of his patients to music. He should be receptive to the suggestions and observations of the music director. They should have frequent interviews. Mutual coöperation between the physician and the music director is essential for both study and therapy.

With this coöperation music can be intelligently employed as a therapeutic agent in itself, or in connection with physical activities, as a form of recreation or as a means of education. It should be one of the most potent factors in facilitating group activities and in socializing the interests of individual patients. Many patients will experience a revival of interests which would otherwise have remained dormant and some will discover musical ability which may prove to be an asset in future adjustments. Occasional extraordinary therapeutic results have been noted and there is no doubt that the general emotional tone in institutional life can be greatly improved by the intelligent use of music.<sup>30</sup>

<sup>30</sup> Van de Wall, W.: A systematic music program for mental hospitals, Amer. Jour. Psychiat., 6:279.

Van de Wall, W. and Bond, E. D.: The use of music in a case of psychoneurosis, Amer. Jour. Psychiat., 91:287.

Occupational therapy. The value to health and happiness of regular employment has been recognized since very early times. Its beneficial effect is greatly increased if the patient is interested in the work and especially if a feeling of satisfaction follows accomplishment. The progress made in the use of work as a therapeutic agent for personality disorders is somewhat coördinate with psychiatric progress in general. In other words, occupational therapy was not used extensively until the early part of the nineteenth century. During recent years it has been developed and applied with such beneficial results that it is now regarded as one of the most important forms of therapy.

Along with this recent development of occupational therapy has come an appreciation of the fact that its therapeutic value is not determined by the extent to which it diverts the attention or arouses the interest of the patient. A hypomanic patient, for instance, if given work which lends itself to rapid accomplishment, may be stimulated to efforts which result in increased excitement. Likewise, a schizophrenic patient who is prone to preoccupation in his own fancies, if permitted to attempt original work, may thus be given further opportunity to pursue his interests in a fanciful world. Experience has shown that original work, although fascinating, may be detrimental to the health of such patients. On the other hand, work requiring close application to detail has been found beneficial. Not uncommonly with patients who are restless, complaining, undecided and continually asking for a change, desirable therapeutic results are obtained by tactfully confining their efforts to certain definite tasks until there has been some actual accomplishment.

Classification and a gradual arrangement of crafts are necessary so that a patient may be assigned to different kinds of work as his condition changes. He is then permitted the same freedom in the use of tools and material as others in his group without being constantly reminded that he is under supervision or that precautions are being taken to prevent misuse of tools or material. A suicidal patient is thus placed in a shop where there are minimum opportunities for self harm and a convalescent patient works in a shop where few precautions need to be taken.

Much of the value of occupational therapy is derived from the manual activity and the satisfaction of concrete achievement. A craft must be selected which is within the patient's grasp and as his condition improves he gains additional satisfaction and confidence from being promoted to more difficult tasks. In the beginning he may not be able to do more than the simple winding of balls of cord and his course of treatment may end with carpentry or printing. If the patient is unable to come to the shop some means of occupation should be brought to him, even if he is confined to bed.

At various times and places many different kinds of crafts have been used.<sup>31</sup> Experience has shown that certain crafts lend themselves to therapeutic efforts much more readily than others. By far the most useful craft is basketry. This is due to the fact that a great variety of work can be done with only a few tools and very little risk of injury to patients or others. Weaving is an equally important craft except that it is regarded by some men as too effeminate. Other crafts, according to the degree and frequency of their usefulness are respectively: brush making, chair caning, carpentry, metal work, printing, gardening and other outdoor work, cement work, book binding and blacksmithing. The use of some of these is limited because of the expense of materials and tools and also because of the risk which would have to be assumed with the less responsible patients. Certain crafts such as needle work, knitting and some art work are obviously more suitable for women, while such crafts as carpentry, cement work and blacksmithing are more suitable for men. It is obvious that the utility of the various crafts varies somewhat with different types of hospitals. standard for rating the utility of crafts should be adopted. One standard which has been found useful requires that the craft be interesting, therapeutic and of such a nature that four-fifths of the work can be done by the patient. Occupational therapy is best applied by instructors who are experienced and skilled in the various crafts and who also have a practical knowledge of the management of mentally sick patients. The desired therapeutic results are best obtained when the work is under the supervision of the psychiatrist in charge. Daily conferences should be held between the psychiatrist and the occupational therapist in regard to the needs of individual patients. The physician should give the patient opportunity to talk freely about his work but any change in the program should be carried out by the occupational therapist after consultation with the physician.

<sup>&</sup>lt;sup>31</sup> Gunderson, P. G.: Crafts and personality in the treatment of mental disorders, Occupational Therapy and Rehabilitation, 7:395.

Physical education. The beneficial effects of physical exercise and recreation have also been recognized since early times. Their value has become recognized by practically all organizations or communities. As a therapeutic agent in treating the mentally sick they are especially desirable because a large proportion of these patients have had little opportunity for physical exercise and recreation and are therefore definitely lacking in physical vigor.

Physical education, however, undertakes to do much more than simply to increase physical vigor. It tends to minimize bodily awkwardness and unhealthy muscular tensions. It increases self confidence, emotional control, adaptability and sociability and it cultivates new interests, a sense of fair play and a more liberal attitude toward life. In general it provides that physical and physiological equipment which is essential for the efficient functioning of a personality. It gives weary adults an opportunity to re-learn how to play.

Some of the activities commonly used in physical education are as follows: gymnastic exercises, drills, baseball, basketball, volleyball, handball, hockey, tennis, golf, bowling, croquet, quoits, running, jumping, dancing, tramping, swimming, skating, skiing, coasting, as well as indoor recreations such as social dancing and games. It is obvious that such activities tend to distract patients from their morbid preoccupations and feelings.

Skill and experience are necessary in applying this form of therapy successfully. Patients who tend to become easily excited may be further excited by certain activities while those who are lacking in self confidence and are self depreciative may become discouraged and depressed by failures in too difficult activities or in competition with others who are more able. Many patients in poor physical health must be very gradually accustomed to increased physical exercise. Otherwise they may be easily exhausted and suffer a relapse because of a too vigorous program. Older patients and particularly those suffering from arteriosleerosis should be given only the mildest forms of exercise. Convalescent patients are expected to participate in tournaments so that they may receive help in adjusting themselves to group activities. All of the patients therefore are divided into special groups according to age, physical vigor and mental condition for the purpose of serving individual needs as far as possible.

It is obvious that such therapy is best applied by instructors who have had special training in physical education and who have also had experience in the practical management of mentally sick patients. Such therapy should always be supervised by the psychiatrist who should have daily conferences with the person in charge of physical education.

Hydrotherapy. In recent decades some forms of hydrotherapy have been found particularly valuable in treating certain mental disorders.<sup>32</sup> Undoubtedly the greatest benefit has been derived from the relaxation obtained in the *continuous* or *prolonged baths* and from the wet pack (see page 317).

Various other forms of hydrotherapy, such as sprays, douches, and sitz baths are used chiefly for tonic and eliminative treatment. They are made more effective by a form of *thermotherapy* which is applied by having the patient sit in a cabinet heated with steam or electric bulbs.

Electrotherapy has been used somewhat sporadically, chiefly in the form of static electricity and by means of galvanic, faradic and sinusoidal currents. Static electricity is applied by a static machine which, beyond a strong suggestive effect upon the patient, has apparently no other virtue. Current electricity is very useful in many diseases of the nervous system although its value in personality disorders is chiefly suggestive. Ultra-violet rays have been found beneficial for physically reduced patients.

Massage is valuable in those disorders in which motor functions are morbidly inhibited. In such cases massage and passive exercises aid greatly in improving muscular tone and metabolic processes in general.

Much can be done by regulating the *diet* of patients. In addition to the usual dietary problems special attention must be given to certain patients because of refusal to eat, because of tendencies to eat too much, or only certain kinds of food, and commonly because of sluggishness of digestive functions.<sup>33</sup> A large proportion of patients are undernourished and require special food in addition to the regular diets.

<sup>&</sup>lt;sup>32</sup> Kindwall, J. A. and Henry, G. W.: Wet packs and prolonged baths. A clinical study of reactions to these forms of therapy, Amer. Jour. Psychiat., 91:73.

<sup>&</sup>lt;sup>33</sup> Henry, G. W.: Emotions and digestive functions, Jour. Amer. Dietetic Assoc., 3:19.

All psychiatric hospitals now require the services of a dietitian whose training and interests qualify her to meet the special needs of the mentally ill. She should have periodic consultations with the nurses and physicians regarding dietary problems and she should make regular visits to all patients so that she may have direct knowledge of the reactions to food served. A personal interest in each patient by the dietitian is necessary to counteract the tendency to routine diet and service. This includes the tendency to serve all patients the same diet and the same amount of food. Those who have a poor appetite are likely to be served too much at one time and the apparent huge quantity which a patient may feel obliged to eat is likely to take away what little appetite he has. On the other hand care must be taken to avoid favoritism or merely catering to the whims of a patient. Among her many other duties she must supervise the preparation and service of special diets. Little is accomplished if the patient does not confine himself to the diet prescribed for him and unless it is adapted to changes in his condition. All prescriptions for special diets should have a specified time at which they are to be discontinued or changed.

These few suggestions may serve to call attention to the dietary aspects of treatment. This part of the general treatment can be maintained at a high level only through the coöperative services of the dietitian and the physician. Their services are required not only because of the physiological needs of the patient but also because the patient may have erroneous impressions regarding his food or he may be unable to make known his wants.

Seclusion and restraint are forms of treatment which should be used only after all other methods fail. Occasionally it is necessary to keep a patient confined in a room because of extreme excitement, destructiveness or violence. Likewise, it is occasionally necessary to restrain a patient in order to stop self mutilation or to prevent interference with some special medical or surgical treatment. In many States these forms of treatment may be used only upon the order of a physician who must report to the state hospital commission the use of such treatment and the reasons therefor.

Prevention of suicide. In all psychiatric practice one of the greatest responsibilities is the care and treatment of patients with suicidal tendencies. Statistical studies show that the suicide rate in the general population varies considerably according to social conditions. It has been steadily increasing since the world war and

at the present time in the United States about 22,000 people destroy themselves each year. Only a small proportion of these are under psychiatric observation at the time that the final act is committed.

A great deal of education of the general public will be necessary to lessen this needless loss of life. The responsibility for this education rests upon those who have had psychiatric training. In the majority of cases there is no important difference between the mental condition of those who commit suicide in a hospital and of those who are still at large.

The impulses which lead to death by suicide are practically a universal experience. Many factors contribute to the suppression of these impulses and to their expression in self destructive acts. Some primitive people believe that suicide is a sin for which there will be punishment in the after-life. Other primitive peoples believe that suicide is a duty—a wife may be expected to commit suicide following the death of her husband. Christian and Hebrew ideals cause self annihilation to be looked upon with horror while oriental people are inclined to regard suicide as a mark of virtue and honor. In China a person may commit suicide to obtain revenge. In Japan it has been the custom to expiate a crime through hara-kiri.

The motivations of suicide in civilized people are essentially the same as those of the primitive.<sup>34</sup> This is shown through studies of trends of psychotic patients who have committed suicide. By self destruction a person annihilates the hatred he feels for a person he once loved and he thus deals with impulses which might otherwise lead to murder. By destroying himself he also terminates his intolerable incestuous or homosexual strivings. He may be impelled to suicide in order to obtain reunion with a loved one in death.<sup>35</sup> In general it may be said that the impulses in suicidal attempts vary from mere desire for a dramatic episode to an overwhelming and desperate passion for self destruction. Consequently the results of such attempts vary from trivial injury to instantaneous death.<sup>36</sup>

All depressed patients, regardless of the formal diagnoses, should be treated as potential suicides. Alert, restless, tense, agitated

<sup>&</sup>lt;sup>34</sup> Zilboorg, G.: Suicide among civilized and primitive races, Amer. Jour. Psychiat., 92:1347.

<sup>35</sup> Jameison, G. R.: Suicide and mental disease, Arch. Neurol. and Psychiat., 36: 1.

<sup>&</sup>lt;sup>36</sup> Zilboorg, G.: Differential diagnostic types of suicide, Arch. Neurol. and Psychiat., 35: 270.

Lewis, N. D. C.: Studies on suicide, The Psychoanalytic Rev., 20: 241.

patients are most likely to attempt suicide and often they require constant observation. Such patients may plan and prepare for a suicidal attempt for weeks. They often make repeated attempts. As a rule those who sincerely intend to commit suicide do not talk about it. Retarded and confused patients who are depressed may make impulsive attempts in moments of comparative clearness. Apparent sudden improvement in a depressed patient may be the result of a final decision to end his suffering.

Suicidal patients are likely to express hypochondriacal and nihilistic ideas. They may be obsessed with thoughts of the dire consesequences of insomnia and with fears of endless torture. They may be impatient, irritable and surly and they may fear loss of self control or that they are going mad.<sup>37</sup>

A number of other factors have been noted in studies on suicide. It appears that there is often a familial tendency to suicide, <sup>38</sup> a manifestation of similar underlying personality traits and of identification with other members of the family. Women make more attempts than men but the men more often succeed. Patients in hospitals are likely to choose the early morning hours for their attempts while suicidal persons at large choose the evening. Most of them are between twenty and fifty years of age but suicide is not uncommon with old people and with adolescents. The preferred methods are the use of poisonous drugs, cutting and piercing, and through asphyxia by hanging, strangulation or drowning. <sup>39</sup> Any conceivable method may be employed and a large proportion of the attempts are poorly planned and ineffective.

Practically all suicidal attempts in psychiatric hospitals should be anticipated through careful study of the patient's condition and trends. The majority of the deaths by suicide represent carelessness in observation and errors in judgment. The more experienced a physician is with suicidal patients the more conservative he is likely to be in the risks which he takes. Suicide is an especially tragic ending because with proper treatment the outcome of the illness is favorable in the majority of the cases.

<sup>&</sup>lt;sup>37</sup> Jameison, G. R. and Wall, J. H.: Some psychiatric aspects of suicide, Psychiat. Quart., 7:211.

<sup>&</sup>lt;sup>38</sup> Shapiro, L. B.: Suicide: Psychology and familial tendency, Jour. Nerv. and Ment. Dis., 81: 547.

<sup>&</sup>lt;sup>39</sup> Lendrum, F. C.: A thousand cases of attempted suicide, Amer. Jour. Psychiat., 13:479.

## CHAPTER XIII

## PSYCHIATRIC NURSING

The nursing of the nervously and mentally ill constitutes one of the most important and interesting services rendered by the nursing profession. No branch of nursing offers a greater variety of work since, in addition to the usual physical illnesses to which the mentally sick are in no way immune, there is an infinite variety of personality peculiarities with which all nurses should be familiar. These personality deviations often necessitate modification of routine nursing procedures and thus give the nurse opportunity to exercise her ingenuity, tact and general resourcefulness. In this way the nurse adds greatly to her capacity for efficient nursing even under adverse circumstances. She becomes expert in gaining the cooperation of patients who are indifferent or even antagonistic. Inasmuch as the peculiarities of the nervously and mentally ill are essentially exaggerations of those traits which all normal individuals possess, experience in psychiatric nursing adds greatly to the ability of the nurse and increases her understanding of people.

According to present trends it will not be long before all nurses will be required to have instruction and practical experience in psychiatric nursing. Many nurses, even with this additional education, hesitate to undertake the care of a patient who has become mentally They are handicapped by a feeling of awe or fear of what seems to them a strange affliction. With inadequate experience they are at a loss to know what to anticipate, what attitude to assume or what course to pursue in case of sudden changes or in emergencies. In fact, their own consternation and awkward technique sometimes cause unnecessary complications. While this training and experience deal with much that is intangible and to some nurses not entirely satisfying, all nurses can acquire sufficient understanding to deal with the practical management of patients. Most hospitals for mental disorders have schools for nurses where both undergraduate and graduate training may be obtained. With proper training and experience a nurse quickly loses her apprehensions and superstitions

in regard to the mentally sick and realizes that her patients retain normal interests and feelings and the capacity to appreciate intelligent nursing care. She acquires the ability to exercise good judgment in situations ordinarily disconcerting. She also develops poise and self confidence which are invaluable to all nurses and essential for those who specialize in psychiatric nursing.

Success or failure in treatment may be due in large part to the attitude and the personality characteristics of the nurse. She must be genuinely interested in her work and she must gladly assume her share of the responsibility in carrying out the treatment. Gradually it will be discovered that she is best adapted to deal with only certain types of patients and she should be governed accordingly in her activities.

Nursing care when symptoms first appear. As no one is immune to mental disorders and since a mental illness is often precipitated by a reduction in physical health, the nurse may be the first person to notice or to be consulted in regard to the early symptoms. If she has prepared herself to meet such situations she will be able to make careful observations and will draw practical conclusions which will aid materially in securing prompt treatment. In many instances her observations and assistance may aid in aborting an attack. She will be able to explain the nature of the illness to responsible relatives or friends and assist them in obtaining expert aid. She may be able to render invaluable service in the management of the home situation and particularly by giving the patient intelligent nursing care until she is relieved of this responsibility.

Many of the symptoms are of such short duration or are so indefinite that a mental disorder may not be suspected. However, it occasionally happens in general nursing experience that the patient develops an obvious mental disorder which requires special psychiatric treatment. Although temporary treatment may be given at home, hospital treatment is more often required. The associations in the home often have contributed much to the causation of the illness and the more neutral environment of a hospital is desirable. Moreover, it is almost impossible to reorganize a home so that treatment can be carried out adequately and safely.

The nurse should know how to obtain the services of a psychiatrist, a psychiatric clinic or hospital, public or private, as may be needed in the particular case. When it is necessary for the patient to go to a clinic or hospital, the nurse should be able to assist in the transfer.

It is desirable to have the cooperation of the patient whenever possible. Sometimes the patient recognizes the nature of the illness and quite willingly accepts the advice of others. In fact seventyfive per cent of the patients at certain well known hospitals are now admitted upon their own application. In any case the patient should not be deceived. If cooperation is not obtained it is much better to be non-committal. When the issue must be met, it is better to tell as much of the truth as is necessary, even though this precipitates trouble. In such cases the experienced nurse will anticipate trouble and be prepared to meet it. Deception merely postpones difficulty and it is detrimental to the mental health of the patient, especially if it causes loss of confidence in those most trusted. Deception in the beginning of the illness often leads to bitterness and distrust which seriously interfere with subsequent treatment. At no other time in psychiatric nursing is a tactful and kindly consideration of the patient's best interests more important.

Arrangements for admission to hospital. When it has been decided that the patient requires treatment in a hospital certain routine procedures must be followed in arranging for admission. Sometimes the application for admission to private hospitals may be made by telephone or mail. Many private hospitals require that application for admission be made in person by a responsible relative or friend who can relate the history and symptoms of the illness and who will assume the financial and other obligations required in the individual case. While the patient may make personal application it is usually required that one or more of his relatives or friends formally assume the responsibility of guardians. This is necessary in case the hospital should at any time desire his removal. When admission to a public hospital is sought application may be made directly to the superintendent of the hospital or through a public health officer or with the aid of a social welfare organization. A state hospital usually takes care of patients from a certain district but admission to another public hospital may sometimes be obtained by special arrangement. Many large cities have municipal hospitals with special regulations in regard to the admission of patients. The law requires that a patient, in order to be admitted to a licensed institution, must either make voluntary application or be certified. Voluntary admission is legally valid only when the patient is aware of the nature of the hospital and voluntarily requests treatment.

Transfer of patient. When the patient voluntarily seeks treatment

the actual transfer is usually accomplished without difficulty. Patients most commonly travel by train or in closed automobiles. The nurse should be continually on the alert for changes in symptoms during the trip. It is necessary to have someone who understands the symptoms give undivided attention to the patient. If the patient promises or implies coöperation little difficulty need be expected, but the nurse should be ready to act wisely and promptly in any emergency. Some patients will feign cooperation in order to gain opportunity for escape. Any patient who is depressed, regardless of the nature of his illness, may require constant observation because of suicidal tendencies. When a patient is disturbed, resistive or unable to coöperate, the transfer is best made in a closed automobile or an ambulance. Sometimes it is necessary for two or more nurses to accompany the patient. Sedatives may be used as a last resort to facilitate the transfer. If the patient does not cooperate he must be certified or accompanied by a responsible relative or friend who will authorize the transfer. If the patient has been certified or committed the nurse must keep in her possession a copy of the commitment papers which she will deliver to the admitting physician at the hospital.

When hospitalization appears necessary all preparations for the transfer should be made beforehand. This includes arrangement for reception of the patient at a hospital, the securing of adequate means of transportation and the presence of persons involved in the transfer. The patient should then be informed of the decision by someone well known to him, preferably the family physician or the psychiatrist. Explanations should be brief and discussions avoided unless they appear helpful to the patient and useful to fill in the time until everything is ready.

If the patient suspects that such arrangements are being made and especially after he has been told, he should not be left alone for an instant. A nurse who is equal to any situation should be constantly with the patient until he is safely located in a hospital. Under the stress of the situation the patient if depressed may avail himself of any opportunity to commit suicide, or if suspicious and delusional may attack others. He should not be permitted to have in his possession or accessible any object with which he might attempt violent action. He should be kept in a position from which there is minimum opportunity to escape or to commit any other undesirable

act. All of such precautions should be taken as far as possible without the patient's being aware of them.

In arranging for an automobile a competent driver should be selected, one who is well acquainted with the route to be traveled and who has his car in good order, well supplied with gasoline and other necessities so that if possible a non-stop trip can be taken. Any stop made may provide a plausible occasion for the patient to get out of the car and therefore increase the risk of escape or of resistance to resuming the trip. If the patient requests help from a police officer it is better to let the patient say what he pleases without interruption.

Admission to hospital. Gross misconceptions concerning hospitals for mental disorders have contributed much to the apprehension of patients at the time of admission. The nurse can do much to make known the fact that these hospitals are for the study and treatment of illness and to give assurance that everyone associated with them is interested primarily in the patient's welfare. The actual admission of the patient is a relatively simple matter. A voluntary patient merely signs a formal application blank after it is evident that its nature is clearly understood. A committed patient may be admitted directly to the ward.

Under ideal conditions an acutely psychotic patient receives the following routine admission care. The patient is taken by a supervisor and introduced to the nurse in charge of the ward. For the next forty-eight hours the patient is under the constant observation of a nurse detailed for that purpose. The physician in charge of the patient may shorten this observation according to circumstances. Accompanying the new patient is an admission sheet designating necessary precautions.

The patient undresses in the presence of a nurse and a tub bath is given unless contraindicated by physical condition or unless ordered omitted by the physician. During the bath the body is closely observed for scars, abrasions, bruises or other abnormalities. A report of the findings is made on the admission sheet.

A shampoo is given if needed and if the patient so desires. The hair, if long, is taken down. Wire hair pins are replaced by bone pins. A cleansing enema is given unless otherwise ordered. The patient is weighed and measured in gown or pajamas without robe or slippers. The body temperature is taken rectally every four hours

for the first forty-eight hours, then twice daily for a week and then automatically discontinued unless otherwise ordered. A specimen of urine is sent to the laboratory in the morning as soon after admission as possible.

All clothing, valuables and baggage are removed from the patient, listed in a book and examined meticulously for sharp articles such as scissors, nailfiles, razor blades, mirrors, spectacles, broken bits of glass, drugs, bathrobe cords and belts. All articles of a harmful nature must be labeled, listed and kept under lock and key. Jewelry, including rings and watches, money, and other valuables are listed and deposited in a safe. Relatives should be encouraged to take valuables home whenever possible. Any money or jewelry on the ward is kept at the risk of the head nurse. If the patient refuses to give up jewelry, for example, a wedding ring, one of the family must sign a statement relieving the hospital of responsibility; or the family must take charge of it. The physician should be informed promptly of any difficulty. No jewelry may be worn by the patient without an order from the physician. Fountain pens, pencils, glasses may be kept in the head nurse's desk and given to the patient for use during the day upon the doctor's order. It should be indicated on the clothing list where jewelry, glasses and other extra articles have been deposited.

Admission notes on the chart should state whether the patient came in walking, in a wheel chair or on a stretcher, his mood, his reaction to admission routine, to nurses and to other patients. Note should be made of any significant conversation. The patient's remarks should be recorded verbatim.

Special consideration and reassurance should be given to the patient by explaining the routine in the new environment and doing everything in the nurses' power to aid in making the adjustment with minimum effort.

The beginning of hospital treatment. The nursing care during the first days in the hospital is by far the most important. During this time the patient obtains impressions which are often lasting. Mistakes made through lack of tact and understanding may cause the patient to be uncoöperative for weeks or months. The surroundings are usually strange and misconceptions in regard to the hospital may seriously interfere with the treatment. The nurse should try to obtain the confidence of the patient as soon as possible. She

will then be in a position to allay suspicions and apprehensions. She can best obtain this confidence by a kindly attitude and an evident willingness to help. She should avoid being effusive or inquisitive in her conversation with the patient but instead she should be an interested and non-committal listener. She should have information concerning the patient's tendencies so that her observations and the nursing care will be intelligently directed. She should regard seriously what the patient does and says and she should be careful not to encourage the manifestations of abnormal symptoms. Detailed discussions of symptoms, or of hospital rules and customs, are usually unprofitable. Arguments are always to be avoided and a display of force is seldom if ever justified.

Usually a patient is admitted to a ward which has special facilities for making detailed examinations and for beginning treatment. This ward is in charge of qualified nurses who aid greatly in the study and treatment by noting carefully anything unusual which the patient may do or say. Special attention should be paid to habits of eating and sleeping and to the general attitude and conduct. Notice should be taken of the degree to which the talk and general activity may be increased, decreased or of any other peculiarity, of the state of feelings (unusual exhilaration, depression or indifference) and of the degree of confusion. It is essential that the nurse record what is actually observed rather than an interpretation of what is observed. Thus if a patient is hearing voices, the nurse should record what these voices say or give other evidence that hallucinations have been observed. A note which merely states that the patient is hallucinating has little value.

To observe well is an art which all do not possess alike but which can be cultivated to a large extent. The ability to make accurate and detailed observations is one of the essential characteristics of an efficient psychiatric nurse.

The physician relies upon the nurse's report for information in making his diagnosis and in directing the treatment. A patient may talk more freely with a nurse than with doctors or relatives. Episodes of peculiar character may occur at a time when the physician is not in attendance, and the duration of these episodes may be so brief that only the nurse witnesses them.

In writing indicate whether the talk is literal by using quotation marks. Indicate something lost by dots. Use parentheses for

explanations. This is necessary to show the connection or lack of connection in the continuous talk. The nurse is not supposed to ask leading questions. Generally it is better to ask none except as directed by the physician.

When first taking charge of a patient make a complete report of even the normal conditions. After that, report whatever change there may be from the original observations. Make note of the patient's adaptation to his surroundings. Mention any evidence which would show whether the patient knows where he is, whether he has an appreciation of time and whether he calls persons by their right names. Report whether the patient seems absorbed or oblivious to surroundings, whether certain attitudes are assumed and for how long. Does he observe ordinary civilities. What are his habits in regard to table etiquette, his eating, drinking, sleeping, dressing, cleanliness and neatness. Mention any extraordinary habits of whatever kind. Make note of laughing, crying, wringing of hands, dancing, singing, shouting, praying, walking, talking or writing. Note the facial expression in connection with his talk and actions. and whether the behavior is spontaneous or not. Note the motion of parts of the body, the amount and rate, any rigidity in parts of the body and the duration.

Notice particularly whether a patient dresses and eats slowly or naturally. A diagnosis sometimes rests on combinations of this kind. A patient may have a disinclination to talk or may even be mute; with this he may be disinclined to eat but he may dress and move in a natural manner. Where a patient does not speak try to find out the cause.

Report any evidence of memory defect. A slight defect of memory is often quite undiscoverable at a physician's routine visit. It may become evident by the fact that in the daily life little things are habitually forgotten.

Mention any fixed belief which the patient appears to have, also any evidence of false hearing, false sight, taste or smell. Always be on the lookout for explanations which he may spontaneously give of his peculiar actions or beliefs.

Be sure to make note of marks of violence, injuries, deformities, helplessness, tremors, rigidity, and any unusual symptoms such as coughing, vomiting, great pallor, cyanosis, involuntary urination and defecation, stating the time and circumstances under which they were observed. Certain routine notations are to be made of temperature, pulse, respiration, appetite, sleep, excretions and menstruction.

Don't make a diagnosis. Don't exaggerate. Don't be facetious. Report what you observe with absolute accuracy. Unless otherwise instructed, preserve all of the patient's writings, scribblings or drawings as they often contain valuable data as to his mental condition.

A nurse should be kind, firm, trustworthy, patient, self controlled, unprejudiced, accurate, alert and resourceful. Let the patient understand that you consider that he is ill and that you are caring for him as you would for any patient with bodily illness. Sometimes it is necessary to say this and sometimes it can be implied. Whatever class of patients may fall into your hands, school your own emotions so that you may meet calmly the many requirements of your position.

Nursing the acutely ill. The nursing of the acutely ill patients is sometimes the most difficult and yet the most interesting. The changes in symptoms are often comparatively rapid and differ with every patient. Most of these patients have been recently admitted to the hospital and therefore may have had inadequate care. Some may have been without sleep and adequate nourishment for days. They may be very disturbed, excited, violent, destructive, confused, delirious or perhaps actively suicidal. In spite of this such patients should be treated as far as possible as rational persons. What is done for them at the time may not be fully appreciated but a kindly consideration of their needs is essential. The nurse must tolerate calmly and patiently much that is exasperating and tactfully guide the patient to a more normal state at the cost of a good deal of personal annoyance or discomfort. That kindness, patience and tact are essential is indicated by the frequency with which convalescent patients express their gratitude for such treatment received while they were acutely ill.

Before undertaking the responsibility of nursing a patient the nurse should know what that patient's condition and tendencies are. When she is relieved of her duty she should give the new nurse this information and also report to her any changes that may have occurred while she was on duty. This is very important in the nursing of the acutely ill. With such patients particular attention must be paid to the physical condition. This is just as important in dealing with the mentally sick as with those who are physically ill. Many

acute conditions characterized by confusion, apprehension, hallucinations, suspicions, excitement and delirium are closely associated with physical illness. Treatment in such cases is directed particularly toward the underlying physical cause. The condition of such patients may vary greatly in short intervals of time. They are usually worse and often delirious at night even though they may be mentally clear during the day. The patient should never be left alone while confused and delirious because in the attempt to escape from the spectres of the night he may inflict injury upon himself or others. Often the assurances or even the mere presence of the nurse in the room is very comforting and quieting to the patient.

Somewhat different problems are presented by excited and exhilarated patients. Some of these patients are very agreeable, entertaining and easily managed. In such cases the nurse may find it difficult to avoid encouraging facetious and mischievous behavior through showing her amusement or even by taking part in the conversation or activity. A nurse who thus responds to such behavior tends to excite the patient further. Some patients are so irritable and fault-finding that the nurse finds it difficult to be tactful, considerate and firm in her decisions. It is rather rare for patients to become suddenly violent or destructive except on disturbed wards and where adequate provision is made for such emergencies.

The nursing care of depressed patients is most important chiefly because of the frequency of suicidal tendencies. All patients who are depressed, regardless of the diagnoses, should be regarded as potentially suicidal. The nurse should not rely upon her own judgment in deciding when and to what extent a depressed patient may be trusted. It is commonly observed that the more experienced a nurse becomes the more conservative she is about giving these patients opportunity to harm themselves. All kinds of cutting instruments, medicines or poisonous substances must be kept locked and it is better to keep the patient ignorant of their location. Patients with suicidal tendencies are apt to swallow needles, hairpins, safety pins, pebbles, broken glass or almost any object that can be swallowed. The most common methods of suicide are by the use of weapons, by drowning, by inhaling illuminating gas or by jumping from windows or in front of moving vehicles. One patient committed suicide by tying the sleeve of her nightgown around her neck, under the bedding, while a nurse was sitting near the bed. Suicide

by strangulation and hanging is the most difficult to prevent. Shoe strings, pieces of wire, bits of ribbon, sheets, towels or anything which may be twisted into a rope suggest suicide. Frequent searches often show that such articles have been secretly hoarded to be used with suicidal intent at an opportune time. Depressed patients should not be allowed to have belts, sashes or bathrobe cords. who are depressed should not be allowed to shave themselves. sors should have blunt points and should remain in the care of the nurse. Actively suicidal patients require constant observation day and night. When they cannot have individual nursing care they may be kept on an open ward so that one nurse may care for several patients. It should always be remembered that most patients who succeed in committing suicide do so when they are mildly depressed and therefore not considered suicidal. It should also be remembered that a patient who is inclined to have brief periods of depression, even though at other times apparently happy, may become suicidal quickly and without any obvious change in his condition.

To the problems which arise because of the suicidal tendencies of the acutely depressed may be added others which require special nursing care. Chief among these are loss of appetite and constipation. These are real difficulties even though the complaints may be somewhat exaggerated. No effort should be spared to make the food as attractive as possible. Some of these patients will not take enough nourishment on their own initiative and must be spoon fed. Some will refuse to eat and may have to be fed by tube. Others must be watched carefully because, while pretending to eat what is served them, they actually hide, give away or throw away their food. Much of their loss of appetite is closely associated with a general sluggishness of digestive functions. This sluggishness frequently is the basis of a variety of hypochondriacal complaints and is commonly manifested by chronic constipation. Some of these patients retain food residue in the colon for two weeks.

Patients who are irritable and suspicious, and particularly those who have ideas of persecution and who hear tormenting and accusing voices, are likely to assault other people with little or no provocation or warning. A grudge may be harbored for months and sometimes years. No unnecessary risks should be taken. Fortunately the patients with these tendencies are rather rare except in a few hospitals specially devoted to their care.

Psychoneurotic patients often receive poor nursing care. The majority of them are apparently not sufficiently ill to require hospital care and are therefore treated at home or in an environment which is either too sympathetic or which may have become impatient or indifferent. Such patients are often neglected because their apparent good health gives the impression that their symptoms are grossly exaggerated or entirely imaginary. On the other hand, because many of these patients have complaints which appear to have an organic basis, they may be subjected to treatment which is of little or no value. It is therefore essential that the nature of the illness should be clearly recognized before treatment is undertaken. Whatever the treatment may be it is usually given more advantageously away from home and in an environment which is not too easily aroused by dramatic appeals. It may even be desirable to keep them away from unduly sympathetic relatives and friends for long periods.

Nursing of disturbed patients. The nursing of very disturbed patients requires the special facilities of well equipped hospitals. Patients may be very active, talkative, noisy, impulsive, violent and destructive. While in this state they tend to have a disturbing effect upon other patients. Inexperienced persons are inclined to feel that such individuals are hopelessly sick while, as a matter of fact, the patients with acute mental symptoms often recover more quickly than those who do not appear especially ill. Incidentally it has often been noted that after the first erroneous impressions have been corrected many nurses prefer to care for disturbed patients.

As in all other illnesses, therapeutic efforts are more likely to be successful when individual problems are studied. Each patient is responsive to somewhat different irritating and exciting factors and the nurse, by careful observation and study of personality traits and tendencies, often can reduce undesirable stimulation to a minimum. In any case the environment of the patient should be as soothing as possible. Many patients are easily aroused by any suggestion of coercion. Any display of force on the part of the nurse usually invites resistance. Patients are managed more easily by using diplomacy, by distracting their interest and by suggesting what is desired. When force is necessary there should be a sufficient number of nurses present to terminate struggling quickly. The nurse should neither have vindictive feelings nor give the impression that punish-

ment is being administered. Disturbed patients should have a regular daily program with certain periods for exercise, occupation, rest and sleep. Since the excited state is a part of a general acceleration of metabolic processes the appetite is often more keen and more than the usual amount of food may be required to compensate for the excessive output of energy. Tea, coffee, highly seasoned food and tobacco should be avoided or at least used in moderation according to the habits of the patient. The more excited patients are best controlled by means of wet packs and prolonged baths. Some of these patients improve more rapidly when isolated and kept in bed. Occasionally it is necessary to keep a very disturbed patient confined in a room. Mechanical restraint may be used as a last resort and when there are not enough nurses to cope with the situation, but only upon the order of a physician.

Nursing of chronic patients. The nursing of patients suffering from illnesses of long duration is at times somewhat tedious and perhaps uninteresting, especially for those nurses who feel that they must have quick results or that their efforts have not been fruitful unless complete recovery ensues. As a matter of fact the nursing of these patients can be quite interesting. No two patients are just alike and each one presents a compromise between the forces tending toward sickness and health. Each one has found a way by which his life may be spent more peacefully and with greater comfort. All of them retain some contact with the world which we call real. Those who are more deeply affected by the thwarted ambitions and ungratified desires of this world are more inclined to dwell in a world of their own fancy. The land of day-dreams has come to be for them a reality. They may seldom be tempted by the pleasures of the real world and they are not troubled by its burdens. They have found refuge in a simpler and more primitive mode of living. It should not be concluded, however, that this change in the patient's mode of adaptation is permanent even though the illness has been of long duration. Many patients recover health after a few years' illness and occasionally health returns after an illness of ten or even twenty vears' duration. Adequate care of these patients requires that the nurse avoid getting into the rut of merely following certain routine procedures. Instead, she should continually try to cultivate those interests and activities in each patient which tend to keep him in touch with reality and which may lead to the reestablishment of

normal habits of living. If neglected, many of these patients eventually become helpless while, if given proper nursing care, practically all of them are able to attend to personal needs, many become partially self supporting and some regain their former health. The nurse should always remember that to the extent to which she keeps her patients occupied with normal interests she may be preventing or arresting mental deterioration. There is hardly a patient who cannot be thus occupied. In most cases the nurse must take the lead, although some patients spontaneously become engaged in healthful activities. Among the normal interests which the nurse may stimulate are included physical exercise, work, games and entertainment. She may engage the patient in conversation or encourage him to discuss his problems. This may require much patience and tact especially if the patient is secretive and inclined to suspect the motives of others.

In public hospitals a large part of the manual work is done by chronic patients. This not only reduces the cost of their care but it is an excellent form of treatment for them. In some private hospitals a greater variety of work may be offered and its purpose may be entirely therapeutic. Much more can be done for these patients by the nurse who has had special training in occupational therapy and physical education. There are always a few patients who are confined to bed because of physical illness or infirmity. Such patients require special nursing care for their general physical needs, and particularly for the prevention of bedsores.

Nursing of convalescent patients. There is often a tendency to feel that after a patient has reached the convalescent stage special nursing care is no longer required. Actually there is no stage in the illness in which proper nursing care can be more helpful. It is at this period that most patients are still quite unstable and are therefore very likely to have relapses. Nurses are commonly deceived by an appearance of health and are apt to assume that a patient has recovered merely because there are no obvious manifestations of illness.

The nursing care of convalescent patients varies considerably and therefore only a few general suggestions will be made. The nurse should be acquainted with the nature of the patient's illness and should know what particular morbid tendencies are likely to be manifested. A hypomanic patient, for instance, may become depressed

and suicidal. A formerly depressed patient may become excited and elated. A patient inclined to be seclusive may avail himself of greater opportunities to withdraw from the interests and companionship of others in order to indulge in introspection or daydreaming. The nurse must be ever on the alert for these and numerous other tendencies which, if neglected, may lead to relapses or to the establishment of unhealthful mental habits, and in some cases to suicide. At this stage of the illness it is particularly important for the nurse to be careful of her own general attitude. If she relaxes discipline or permits undue familiarity she lessens the control which she should have over her patients. On the other hand, if she does not consider the individual interests and wishes of the patients or assumes a domineering or conciliatory attitude toward them, she will incur the resentment of some and encourage dependence in others. Everyone likes to be treated as a rational being and this is particularly true of the convalescent patient.

Many patients suffer much chagrin in connection with the apprehension that they have become stigmatized because of having had a mental illness. The nurse can help to cultivate the much more healthful attitude of regarding the illness just as a physical illness and by citing anonymously other patients who have recovered and returned to their normal habits of living. She will have abundant opportunity to make use of her own general culture and accomplishments in guiding the many different types of individuals to normal interests. To be successful she must become expert in managing the everyday affairs of human beings with tact and diplomacy. She will learn how to encourage patients without making statements which are obviously unwarranted and without creating false hopes of recovery at some definite time. She will be impartial in her attitude toward all patients and at the same time she will be able to make allowance for individual needs or peculiarities. While she will try to keep all patients interested in social, recreational and occupational activities, she will tactfully avoid, as far as possible, the formation of cliques. Finally, she will be guided by the general principle of allowing convalescent patients to direct their own affairs and to be responsible for themselves according to their individual capacities.

Private nursing of the mentally ill. In small sanitaria and in private homes the nursing care of the mentally sick must obviously be somewhat different. The lack of facilities, the annoyance or

curiosity of neighbors and the interference of relatives and friends complicate the nursing problem. Nevertheless some mildly sick or convalescent patients improve more rapidly when they have more of the familiar associations and freedom of action than is possible in the hospital environment. In such cases the nurse may be largely responsible for the welfare of the patient and she may have to depend a great deal on her own experience and resourcefulness. In most instances the responsibility for the treatment is assumed by a psychiatrist in private practice and in some of the United States this is required by law. However competent the nurse may be she will still be required to exercise considerable ingenuity in adapting hospital treatment to the home environment.

The nurse in private practice will be called upon to deal with all kinds and degrees of nervous and mental disorders, at least until proper hospital care and treatment are obtained. Practically all patients who are admitted to psychiatric hospitals require the services of psychiatric nurses for varying periods before and after hospital treatment. No nurse is qualified to render this service until she has completed a recognized course of training and experience in a hospital for mental disorders.

A large proportion of the patients requiring private psychiatric nursing are psychoneurotic. These patients are likely to be misunderstood even by nurses and physicians. The symptoms are often so indefinite and sometimes so changeable that the patients are commonly neglected or exploited. All kinds of "cures" are tried, often with little or no relief. Even when the patient's illness is diagnosed as "neurotic," "neurasthenic," "hysterical," "psychasthenic" or "psychoneurotic," there is a marked tendency to regard the symptoms as imaginary or subject to the patient's control. To the inexperienced this attitude may become plausible through the assurance of the physician that there is no "organic basis" for the patient's complaints.

The psychoneurotic patient should be given every opportunity for the improvement of his physical condition before undue emphasis is placed upon the functional component of the illness. It frequently happens that an individual becomes "neurotic" only when reduced in physical health and that he will regain his usual mental health when the physical condition is improved. Others develop a "neurotic" personality through months or years of unhygienic living, and may require long periods of personality training and reëducation. Psychoneurotic patients are treated most successfully by psychiatrists who have specialized in these particular disorders and who will advise the nurse as to how she may coöperate in the application of the particular forms of therapy.

The nurse will find that these patients are usually selfish, self centered and inclined to dwell upon their symptoms. They are likely to be so influenced by feelings of personal discomfort that they quickly tire of any form of treatment which requires their continued effort. On this account they are inclined to change physicians or the form of treatment frequently. Some may find a life of partial invalidism preferable to the struggle to meet the responsibilities of normal life. The daily adaptation to the demands of intimate human relationships may require greater self sacrifice than the psychoneurotic can tolerate.

As a rule the psychoneurotic individual is the product of years of maladaptation and unless some powerful influence intervenes the familiar pathway will be followed. Whatever the treatment may be the patient will often be in need of the assistance which the nurse may give. She will encourage the patient to keep on trying even after the limit of endurance is professed to have been reached. She must tactfully neglect discussion of symptoms and at the same time keep the patient occupied with normal activities. She will expect many failures and learn to be satisfied in some instances with slow and periodic improvements. She should realize that quite different forms of treatment often reach the same goal. Finally, she should never forget that the patient is suffering from a real and not an imaginary illness.

Special forms of nursing therapy. A common form of therapy of which the nurse usually has charge is the continuous or prolonged bath. This bath is best given in a tub somewhat larger than the usual bath tub. It is specially constructed so that there is an inflow of water at several different points and one outlet for the water at the foot of the tub about six inches from the top. The water throughout the tub is kept at an even temperature. Each tub is equipped with a thermostatic control which is usually located in the wall of the room and which automatically keeps the water at any desired

temperature. However, since these controls occasionally get out of order a bath thermometer is also used as a matter of precaution. Unless the nurse receives special instructions in individual cases she should never allow the temperature of the water to exceed 98°F. or to drop 92°F., the ideal temperature being 96°F. The bath thermometer should be tested before being used and the temperature of the water should be determined at frequent intervals by this thermometer rather than by the thermostatic control.

Before the bath oil is applied to the patient's skin to prevent irritation from the prolonged application of the water. The patient is then enfolded in a sheet and placed upon a canvas hammock, which is suspended by a number of hooks on the outside of the tub, at such a depth that the entire body is immersed in the slowly flowing water. The head rests upon an air cushion and a rubber bath cap is used to keep the hair dry and the water out of the ears. Frequently renewed cold compresses are applied to the forehead. The pulse is taken at regular intervals and if there is a marked or sudden rise the patient is removed from the tub and a physician is notified. Some patients in poor physical condition do not react well to prolonged baths.

These baths are commonly prescribed for insomnia, restlessness, excitement and confused, delirious states. Their success depends upon keeping the temperature as near the ideal as possible and upon having quiet and soothing surroundings. Therefore the room should be darkened and isolated from the noise of the ward. There should be no conversation and every effort should be made to have the patient comfortable and relaxed. Plenty of water should be given to drink and if the bath is continued over several hours, hot cocoa, broth and other nourishment may be given. These baths commonly have such a soothing effect that the patient goes to sleep while in the tub. The bath may be continued for several hours according to the physician's direction. On leaving the bath the patient is thoroughly dried, wrapped in a warm blanket and put to bed. This should be done in such a way as to avoid stimulation and to reduce the patient's exertion to a minimum. Rest in bed after a bath is desirable.

In actual practice in modern hospitals the following equipment and procedure are employed:

<sup>&</sup>lt;sup>1</sup> Chapman, R. M.: The control of sleeplessness, Amer. Jour. Psychiat., 3:491.

### Precautions:

- 1. Never leave patient alone in the tub room. If patient becomes assaultive or attempts to drown himself, shut off the inflow and open the drains. Ring emergency bell.
- 2. Watch patient's color, pulse and respiration. Report any marked variations.
  - 3. Keep temperature of tub regulated (96°-98°).
- 4. Never attempt to deal with a disturbed patient without sufficient assistance.

# Points to be emphasized:

- 1. Explain treatment to patient before it is given.
- 2. Make patient as comfortable as possible to encourage relaxation.
- 3. Encourage patient to drink plenty of fluid.

### Equipment:

Tub (continuous flow type with thermostatic control); canvas hammock (suspended in tub by straps); quilted pad; three large sheets; rubber pillow with pillow case; ice bag and cover; bath mat; face towel; cotton seed oil and cotton balls; pitcher of fluid and cups and drinking straws; sponging alcohol; bath thermometer; prolonged tub record book; bath towel.

# Preparation of bath:

- 1. Close outlet of tub. Adjust thermostat to 96°-98° and start flow of water into tub. Keep temperature of water at 96°.
  - 2. Adjust hammock.
  - 3. Tie quilted pad to straps of hammock.
  - 4. Place large sheet over entire canvas.
- 5. Place second large sheet over top of tub and fan this cover sheet to foot of tub as in bed making.
  - 6. Pour cotton seed oil into small container.
- 7. While tub is filling, prepare ice cap and fluids and bring to tub room along with the book for recording treatment.

### Preparation of patient:

- 1. Explain treatment to patient.
- 2. Patient undresses, puts on night clothes, goes to toilet.
- 3. Patient is taken to tub room, night clothing is removed, patient is draped with sheet.
- 4. Offer patient a rubber cap to protect hair. Apply cotton seed oil to body, particularly hands, feet, groin, knees, arm pits, body creases.

### Procedure:

- 1. Assist patient into the tub, removing draping sheet after tub sheet has been draped over body.
  - 2. Draw up tub cover.
  - 3. Place rubber cap under head and apply ice cap to head.
  - 4. Place face towel under patient's chin.
  - 5. Subdue light in room and keep temperature in room regulated.

- 6. Take pulse every 15 minutes and chart in prolonged tub book.
- 7. Check temperature of tub water with bath thermometer every 15 minutes.
- 8. Encourage patient to take fluids every 15 minutes.
- 9. Encourage patient to relax and to sleep if possible. If patient persists in talking, record what he says but do not encourage conversation.
- 10. If patient is uncoöperative the physician may order the use of a protecting canvas, which has a pad to come between patient's body and canvas.

### Duration of treatment:

Treatment is given for one hour unless otherwise ordered.

### After care of patient:

At end of prescribed time for treatment shut off the water, open tub outlets, remove patient promptly from tub.

Either give patient a cold shower or dry him off and give him an alcohol rub. Accompany patient to room and encourage him to remain in bed at least one-half hour following treatment.

# After care of equipment:

- 1. Wring out wet linen and throw down linen chute.
- 2. Scrub hammock and tub with soap and water. Hammock is to be placed on open air porch over night by night nurse. If tub has been used for isolated patient, scrub hammock and tub with 1% lysol and rinse off thoroughly.
  - 3. Wash bathing cap and ice cap with soap and water.
  - 4. Air room thoroughly.

Occasionally a patient may be so disturbed that a prolonged bath cannot be given. Some excited patients apparently are not amenable to this form of treatment, as they may get in and out of the tub or splash the water. Experience has shown that it is better to allow this to occur than to restrain the patient forcibly and thereby create unpleasant associations in connection with the bath. Usually after a few trials the patient will remain in the tub, but if he is too disturbed the physician may order the use of a canvas cover.

Another form of therapy applied by the nurse is the wet pack. This is also given for its sedative effect and should be used only as a form of treatment. Occasionally a patient may feel that the wet pack is a form of punishment and when such an impression is held much of the virtue of the pack is lost. The attitude of the nurse determines to a large extent what the effect of this treatment upon the patient may be.

The nature and purpose of both the prolonged bath and the pack are frequently misunderstood by the patient<sup>2</sup> and the nurse should

<sup>2</sup> Kindwall, J. A. and Henry, G. W.: Wet packs and prolonged baths. A clinical study of reactions to these forms of therapy, Amer. Jour. Psychiat., 91:73.

give explanations and reassurance at every opportunity. Much of what the nurse says is grasped and remembered by the patient and it contributes a great deal to the recovery.

The wet pack is usually prescribed for approximately the same conditions as the prolonged bath. It can be used for markedly disturbed patients when the bath is not applicable or effective and it is particularly efficacious with some agitated depressed patients. The pack is used for periods varying from one-half to several hours, according as the physician prescribes in the individual case. The optimum period is two hours because a shorter time interrupts the sedative action and a longer period may lead to discomfort through inability to change body posture. The pack should not be applied until a physician has made a physical examination of the patient. Some states require by law that a physician be present during the first application so that unfavorable reactions may be quickly detected.

The nurse should adhere strictly to the following instructions for giving a wet pack:

### Precautions:

Watch patient closely in pack. Report *immediately* any unusual condition such as very rapid or weak pulse, face flushed or cyanotic, refusal to take fluids. Cessation of treatment may be indicated. In warm weather there is danger of overheating and occasionally the result has been most serious.

# Points to be emphasized:

- 1. Explain treatment to patient before it is given.
- 2. Treatment to be given quietly, quickly, but deftly, with sufficient nurses to control patient.
- 3. To insure good reaction, envelop patient securely avoiding wrinkles in sheets and have no surfaces of body touching each other.
  - 4. Encourage patient to drink plenty of fluids.

### Equipment:

Pack tray; 3 gray blankets; bath blanket; face towel; enamel pack basin lined with turkish towel; rubber mackintosh with sheet; hot water bag with cover; rubber pillow case; 2 long pack sheets, fanned; 1 draw sheet, fanned; ice cap with cover.

# Technique:

While one nurse is preparing patient and bed, another nurse places the two long pack sheets and the draw sheet, fanned and folded in water, wrings them out thoroughly and brings them to the bedside in the pack basin wrapped in the turkish towel.

- 1. Explain treatment to patient.
- 2. Patient is undressed, draped in bath blanket, uses toilet.

3. If patient's skin is dry or if packs are given continuously over a period of time, apply emollient to patient's skin before placing in pack, particularly the hands, feet, buttocks and creases of body.

# Preparation of bed:

- 1. Fan bed clothes to foot of bed. Remove pillow from bed. Place mackintosh with sheet on bed and tuck in at side.
- 2. Place first blanket on bed crosswise, two-thirds more on one side than on the other.
- 3. Place second blanket folded crosswise, two-thirds distance from top of bed.
- 4. Place third blanket on bed in same manner as first blanket, only allowing two-thirds of blanket to hang off on opposite side of bed.
- 5. Place the first wet pack sheet in center of bed and unfold within 6 inches of side of bed and 4 inches from top of pack blanket.
- 6. Place wet draw sheet in bed in same manner, 12 inches from top of first sheet.
- 7. Place second wet pack sheet over draw sheet allowing sufficient amount to cover patient's feet.

#### Procedure:

- 1. Place patient on bed still protected by bath blanket. Draw left side of pack sheet over patient's left leg, under right leg and across body, arms left free. Remove blanket when patient is covered. Turn end of sheet over feet, leaving no area exposed.
- 2. Bring one side of draw sheet between body and arm. Place patient's arm along side of body with palm of hand flat against hip. Fold sheet back over arm and under body.
- 3. Bring up opposite side of draw sheet between body and arm and fold it in same manner under patient.
- 4. Bring up first side of large pack sheet across patient, square upper edge of sheet, fold firmly around patient's body in mummy fashion. Bring up second side and apply in same manner.
- 5. Bring short side of pack blanket firmly about patient, squaring it about shoulders. Bring long side of pack blanket sheet about patient in mummy fashion.
- 6. Fold foot blanket over patient's feet and legs, turning edges toward center.
  - 7. Fold third blanket about patient exactly like first blanket.
- 8. Place pillow protected by rubber pillow case under patient's head, ice cap to head and hot water bag to feet.
- 9. If patient is uncoöperative add 3 protection sheets to equipment. Place them across patient, about angle bar and tighten.
- 10. Draw up bed clothes, fold towel in a V beneath patient's chin and tuck ends under blanket around patient's neck. Darken and ventilate room.
- 11. Straighten room, place at bedside pitcher of fluid, paper cups, drinking straws and pad and pencil for recording pulse, respiration, fluid intake and general reaction of patient. Record pulse every 15 minutes.

12. Encourage patient to take fluids, keep room quiet and discourage conversation. If patient finds position uncomfortable, a small pillow under knees or in small of back may relieve this.

# Duration of treatment:

On acute service, 2 hours unless otherwise ordered. On other than acute, 1 hour unless otherwise ordered. If patient is sleeping in pack and his condition seems favorable, permission should be procured to extend time of treatment rather than to disturb patient.

# After care of patient:

Remove patient quickly and quietly from pack, protecting with a bath blanket. Give patient a shower or alcohol rub and keep in bed for one-half hour. Remove all equipment from room to utility room.

# After care of equipment:

1. Wash mackintosh with soap and water. 2. Cleanse basin. 3. Reset tray.

As a rule, when a pack is prescribed, it is understood that a warm wet pack is intended. A warm pack is given by wringing out the sheets in water as hot as the hands will allow and applying the pack promptly before the sheets have an opportunity to become cool. When a cold wet pack is prescribed the sheets are wrung out in water at about 60°F, and applied as described above. The cold pack is sometimes prescribed for over-active, disturbed patients. Its first effect is stimulating and somewhat of a shock. Usually in a few minutes, however, the feeling of chilliness is replaced by a soothing feeling of warmth. Some time after this a feeling of heat is experienced. Unless the patient responds in this way and if he remains cold, cyanotic and shivering longer than five minutes, he should be removed from the pack. These stages are sometimes referred to as the stimulating, neutral or sedative and superheated stages. Unless the pack is administered for a short period the neutral stage should be prolonged as much as possible. This may be accomplished by removing the blankets. It will be found that the details of administration of the wet pack vary in different hospitals although the general principle is essentially the same.

There is probably no more important part of the nursing care than the proper attention to the patient's *food*. With good management and personal interest the food can be served promptly after being cooked and in an appetizing manner. Good food, properly cooked and served, not only adds to the comfort and pleasure of the patient but it is frequently a vital factor in the recovery of health. A large

proportion of patients are undernourished and do not improve until they begin to regain their normal weight. In fact, one of the most reliable indications of improvement is a gain in weight. Special care must be taken to avoid stereotyped meals and to avoid serving the patient too much at one time. Depressed patients are likely to lose whatever little appetite they may have when confronted with an amount of food which they feel unable to eat. Under ideal circumstances the daily needs of each patient should be studied and the diet altered accordingly. In any case all special diets prescribed should be for a specified period at the end of which appropriate readjustments should be made. There should always be close coöperation between the physician, the dietitian and the nursing staff in this respect.

In addition to the usual problems of securing proper nourishment for sick people, there are many obstacles to be overcome because of the peculiar notions which many patients have in regard to food. Some patients feel that the stomach and intestines are already overloaded; some feel they are unworthy of food; some feel that they may not eat because they are unable to pay for the food; some are confused and unable to eat without aid; and some refuse to eat because they think the food is poisoned. To meet such situations much ingenuity and patience are required. Some of these patients must be spoon fed, perhaps for days or weeks. Spoon feeding may be very uncomfortable and even dangerous for the patient unless done properly. It is very important that plenty of opportunity be given for mastication and swallowing. Those patients who have difficulty in swallowing frequently become choked, especially if they are hurried or try to swallow large amounts.

Often a patient who believes he cannot swallow will accept food when he is fed by a nurse. Likewise a patient who feels too unworthy to eat may recognize the nurse's responsibility or he may even be relieved that someone else takes the responsibility for what he eats. The nurse accomplishes most under these circumstances by patience and by making the food and the eating as attractive as possible. If the patient is inclined to bolt his food he should be given specially prepared food such as chopped meat, and soft vegetables and desserts. If he resists spoon feeding by clenching his teeth the nurse should not attempt to use force but should report the situation to the physician who will probably order feeding by tube.

It is only an occasional patient who is so resistive to spoon feeding that he must be fed by tube. Some patients may be so confused, retarded or preoccupied that they are unable to or will not swallow. These patients also must be fed by tube. Tube feeding should be avoided whenever possible because it is an abnormal way of receiving food, the gastric secretions do not have their usual psychic and gustatory stimulation and it is difficult to maintain a varied and wellbalanced diet. In addition tube feeding tends to become habitual. Some paranoic patients regard it as a form of persecution for which they will ultimately obtain revenge. On the other hand some patients actually obtain pleasure from tube feeding. If a patient is well nourished the physician may order that tube feeding be delayed for even two or three days with the hope that hunger will cause the patient to eat voluntarily. Even though tube feeding is necessary the meals should be served as usual and attempts should be regularly made to persuade the patient to eat.

The actual technique of tube feeding is not uniform. While the nasal and oral routes are both frequently used, the latter is preferable. because the nasal mucous membrane is delicate, easily injured and very sensitive to foreign bodies. Moreover, the patient feels that the nasal route is an unnatural and unesthetic channel for the administration of food. The pasal route is chosen as a rule when the patient is very resistive to opening the mouth. A somewhat smaller tube is used for this purpose. The feeding may be given with the patient sitting up or lying in bed. The former posture is preferred but in case the patient is very resistive restraint on a bed is more practical. The patient is protected by a rubber sheet and a towel is tucked in about the neck to avoid soiling the clothing. The tube is lubricated with a special lubricant, milk, olive oil, or some of the feeding, and when it is inserted the patient's head is bent slightly forward. This aids in passing the tube by the larynx into the esophagus. When the oral route is used and regardless of coöperation, a wooden wedge is introduced between the teeth to keep the mouth open and to avoid giving the patient opportunity to bite or constrict the tube with the teeth. Sometimes it is advisable to have a nurse hold the wedge after it has been inserted so that the operator may confine his attention to the insertion of the tube. Care must be taken to avoid kinking or doubling the tube since no fluid will pass under these conditions. A mark on the tube indicates when suffi-

cient length has been inserted. Occasionally the tube will enter the larynx and cause evident distress, manifested by strangling, coughing and sometimes by cyanosis. In such cases air can be heard and felt passing in and out of the tube as the patient breathes. The tube should be immediately withdrawn and another attempt made to pass it into the esophagus. Some patients are anesthetic in the region of the larvnx and unless special care is taken the tube may be inserted by mistake into the lungs. Carelessness in this respect may result in serious illness or even in death. Some patients learn how to prevent the nasal tube from passing down the esophagus and instead force it into the mouth. In such cases two tubes should be used. The nasal tube is inserted and then just as the patient opens his mouth to let the nasal tube pass out, the mouth gag is inserted and a larger tube introduced by mouth. By means of this additional procedure much struggling and possible injury to teeth is avoided especially when there is great resistance to opening the mouth. Any injury to the patient's teeth should be considered as evidence of faulty technique. Whenever possible a physician should take charge of the tube feeding.

When the patient does not resist the operator may steady the patient's head with the arm of the hand which inserts the wedge while he introduces the tube with the other hand. In some cases the patient's head may be held firmly by wrapping a damp towel around it somewhat in the manner of a tourniquet and then holding the towel tightly. This method is unsuitable if the patient is resistive because the towel must be twisted more and more tightly and the constriction may lead to hemorrhage with discoloration of the eyelids. The safest and most effective method in such cases requires that the patient be lying on his back in bed or on a treatment table. In order to overcome resistance there must be a sufficient number of nurses to hold the patient without risk of personal injury, or the patient should be put in a warm wet pack and kept there for at least half an hour after the feeding.

The following is an outline of the standard technic and equipment for tube feeding:

#### Precautions:

Tube feeding is a medical procedure. Tubes are not to be inserted nor withdrawn by the nurse. Be alert to possibility of tube being introduced into trachea. Have a basin of water available for testing tube after insertion and

have a room light enough to be able to note patient's reaction, for instance, change in color.

# Points to be emphasized:

Explain treatment to patient before it is given. Have the rubber tube in good condition, hard, and marked with a white circle 20" from end. Have patient remain quiet after feeding. Be certain that all equipment brought into room on tray is removed after treatment.

# Equipment:

Large white enamel tray covered with towel; deep enamel basin for tubes with folded towel and cracked ice; small round basin containing water (for testing tube); pitcher, pint size (for feeding); emesis basin wrapped in towel; ounce size medicine glass for mineral oil; nasal tube \$26Fr; oral tube \$30Fr; tongue blade with gauze protector; table spoon (for stirring feeding); mouth gag (wooden, protected with gauze); mouth gag (metal, protected with metal tip); rubber apron; rubber treatment square folded in draw sheet; face towel.

### Preparation of patient:

Give the patient an opportunity to drink the feeding. If resistive to feeding, patient is placed in a warm wet pack, remaining in same for at least one-half hour after feeding.

# Preparation of tray:

Prepare the feeding in the kitchen according to formula ordered. Place feeding and pitchers of water and of tomato or fruit juice in a pan of hot water until ready for use. (Feeding and water must be 98° when given.) Place tube on ice in basin. Assemble all other articles on tray. When physician arrives to give treatment, remove pitchers of feeding and water from basin, dry and place on tray along with medication ordered. Carry tray to bedside.

### Procedure:

Protect patient with rubber treatment square covered with draw sheet. Remove tube from ice, lubricate thoroughly with mineral oil, using tongue blade and sponge, for at least 10 inches. Physician inserts tube until marking is near nostrils or lips. Nurse holds basin of water for testing location of tube. Physician may test this by listening. If tube is placed in water, air bubbles will indicate that tube is in trachea and necessitate its immediate withdrawal. Funnel is held 6 to 8 inches above patient's head. Feeding is given slowly. To prevent air entering stomach funnel is not permitted to become empty. A small amount of water is given first to clear away mucus, then tomato or fruit juice, the feeding, and finally the medication followed by water. (This order may be changed by the physician.) When feeding is finished, tube is pinched off and removed and placed in basin.

Clean patient's face. Encourage patient to remain quiet for 20 or 30 minutes. Place all equipment on tray and remove to kitchen.

### After care of equipment:

Run cold water through tube, then wash in hot water and soap. Rinse thoroughly and hang up to dry. Once a week boil tubes in salt water for 3

minutes. If patients are being fed continuously for a period of time, mark with adhesive a tube for each patient. Scrub mouth gags with water and soap. Wash glass ware and enamel ware with soap and water.

### Charting:

The regular tube feeding ordered is 1000 calories T.I.D. or 2000 calories B.I.D. or 3000 calories Q/D. Chart in the nourishment column, noting the amount and time and the physician's name.

In spite of the fact that all food must be given in fluid form the diet must be varied and well balanced. For any carelessness in this respect the nurse may be held chiefly responsible. Three or more feedings may be given during the day but large quantities at one time should be avoided. The following are examples of well balanced tube feedings:

# Regular tube feeding:

Protein 76, Fat 192, Carbohydrate 225, with a total of 3000 Calories per day.

B.I.D.		T.I.D.
480 cc.	Milk	320 cc.
15 gm.	Lactose	10 gm
30 gm.	Sugar	15 gm.
2	Eggs	2
60 gm.	Malted milk	33 gm.
240 cc.	Tomato juice	160 cc.
60 cc.	Olive oil	40 cc.
240 cc.	Water	160 cc.

This tube feeding is adequate in calcium, salt and the vitamins but slightly low in phosphorous and iron. Each B.I.D. feeding gives 1500 calories and each T.I.D. feeding gives 1000 calories.

### High vitamin tube feeding:

To the regular T.I.D. tube feeding add 15 cc. cod liver oil and  $\frac{1}{2}$  yeast cake. Decrease the olive oil to 30 cc.

To the regular B.I.D. tube feeding add 20 cc. cod liver oil and 1 yeast cake. Decrease the olive oil to 40 cc.

### High protein tube feeding:

Protein 102, Fat 184, Carbohydrate 230, with a total of 3000 Calories per day.

B.I.D.		T.I.D.
600 cc.	Milk	360 cc.
4	Eggs	3
42 cc.	Olive oil	27 cc.
46 gm.	Malted milk	28 gm.
240 cc.	Tomato juice	160 cc.
15 gm.	Lactose	15 gm
$25~\mathrm{gm}$ .	Sugar	18 gm.

Some patients after being fed will attempt to regurgitate the food. This may be practised to such an extent that it constitutes a serious problem. Sometimes the entire feeding may be regurgitated with comparative ease. In such cases it is essential that a nurse sit or walk with the patient. If this does not suffice regurgitation may be prevented by giving smaller feedings at more frequent intervals and by keeping the patient flat on his back without a pillow for a short period after the feeding.

Special attention must also be given to the sleep<sup>3</sup> of mentally sick patients. Many of them have abnormal habits of sleeping. Excited patients are frequently too active to sleep; depressed patients often do not sleep soundly or may feel that they do not sleep at all; and those patients who enjoy day-dreaming often go to bed very early and are reluctant to get up in the morning. It is very important that the nurse keep an accurate record of the patient's sleep. This record should be based upon her own observations rather than upon what the patient reports. Although sleep is not essential as long as rest and relaxation are obtained, nevertheless the habits of sleeping usually indicate the degree of improvement. The nurse can do much for a patient who is suffering from insomnia by encouraging rest and relaxation for an hour or two before the time for retiring, by giving warm packs, warm baths or gentle massage, by having the patient retire regularly at a certain time, by making the bed comfortable and by keeping the room darkened, quiet and well ventilated. Sleeping medicines should be avoided as much as possible.

Many who suffer from loss of sleep can be helped by the nurse's reassurance that a full night's sleep is unnecessary. The nurse should study the habits and environment of the patient to be sure that there is not too much sleeping during the day and at the same time to provide suitable opportunities for rest during the day. She will find that a warm glass of milk or a prolonged bath may induce sleep. She should see that there are no windows rattling or shades flapping, that there are no noisy steam or water pipes and that other patients remain quiet. Elderly, hypertensive patients who regularly awaken early in the morning should be permitted to stay up later in the evening. She should keep herself well informed regarding the trends and activities of tense, agitated, sleepless patients because of the increased suicidal risk associated with failure to sleep.

<sup>&</sup>lt;sup>3</sup> Muncie, W.: Insomnia in clinic psychiatric practice, Bull. Johns Hopkins Hospital, 55: 131.

### SPECIAL PRECAUTIONS AND EMERGENCIES

In this branch of nursing practice, accidents and emergency situations are likely to arise at any moment on account of suicidal and homicidal tendencies, attempts to escape, delusional ideas, hallucinatory experiences and mental deterioration. Those arising from suicidal tendencies are perhaps the most serious because of their frequency and the fact that these tendencies usually occur in patients suffering from recoverable disorders.

Suicidal tendencies. See pages 298 and 310.

Remarkable ingenuity is often shown by patients particularly in making suicidal attempts. One patient secreted bits of twine, picture cord and hems of garments, for days and perhaps weeks, braided them into a rope and then one night made a noose, fastened one end of it in the middle of a window between the sashes, placed the noose around his neck and allowed himself to drop. This was done without any noise except possibly that of closing a window. Another tied two neckties together and hanged himself from a pipe near the ceiling of a bathroom. A third broke a heavy glass tumbler in a blanket so that he would make no noise and cut his femoral artery with one of the pieces. A fourth secreted a cord in the reservoir of the toilet until during a period of relaxed vigilance her purpose was achieved. A fifth drowned herself in the bathtub. In fact, there are so many ways in which self destruction has been achieved that it would be folly to try to enumerate them.

The attempts made are often so crude and desperate that there may be mutilation, infected wounds or prolonged illness. For instance, one patient broke a window and chewed the glass; another cut himself in several places with an infected instrument and then rubbed infected material into the wounds; and a third drank carbolic acid, causing extensive burns of the mouth, throat and stomach and subsequent stricture of the esophagus. Pieces of glass, tacks, safety pins or almost any small object may be swallowed. In desperation a patient may try to swallow a dental plate, dive into a glass door, but his head against a wall, cut himself with his own eyeglasses or try to strangle himself with some of his clothing.

Homicidal tendencies. Such instruments as ice picks or chisels have been used in attacking others. A door knob or a cake of hard soap in a sock is occasionally used as a weapon.

All patients having ideas of reference or delusions of persecution

should be regarded as potential homicides. Those patients whose delusions of persecution are directed toward specific individuals and are reinforced by hallucinations are most likely to attack other people. In general, the probability of a homicidal attempt varies inversely to the degree of mental deterioration. In other words, the less the mental deterioration, the more likelihood there is of an attempt. The motives and consequences of homicidal attempts vary as in the cases of suicidal attempts.

Prevention of accidents. Besides casualties resulting from suicidal and homicidal attempts, there may be accidents caused in many other ways such as by struggling with nurses and attempting to escape. Hallucinations in delirious conditions sometimes lead to acts of violence. Some deteriorated patients swallow almost any object without concern for possible ill effects.

It is essential to learn the patient's tendencies as soon as possible. Such information should be in your possession before you assume responsibility for the patient. Be vigilant with all patients until you know in what ways they can be trusted. Do not allow patients out of your sight or behind your back until you know you can do so safely. Having become acquainted with a patient and his tendencies, direct your efforts accordingly. Some patients may require constant observation day and night, while others require special observation only for some particular tendency which is not sufficiently marked to warrant constant observation. Some patients have to be searched daily for dangerous objects. All dangerous weapons and all objects from which they can be made as well as any substances which may be injurious when swallowed must be kept from all patients who are not entirely responsible.

Mere deprival of objects and facilities for violent action is ineffective unless the nurses exercise constant vigilance. This vigilance includes not only the patient but everyone who comes in contact with the patient. A domestic, a mechanic, even though in the employ of the hospital, or a friend or relative require as much supervision as the patient. Do not rely upon the judgment of visitors. They are not qualified to decide what a patient may have. Every package should be inspected before it is delivered to the patient. Such things as knives and even revolvers have been brought into the wards of well regulated hospitals. Never allow your keys to leave your possession and be sure to lock all doors which should be locked.

In well organized psychiatric hospitals there are wards where special care can be given to suicidal or otherwise violent patients. These wards have a sufficient number of competent nurses to deal with any emergency. All objects which a patient might misuse are either prohibited on these wards or they are in the immediate charge of a particular nurse. No glass or small metal objects are permitted. Thorough daily search of clothing and of the patient's room is made for any device which may have been improvised and secreted until an opportune moment for its use. Through constant study of trends and activities any patient requiring close supervision is promptly transferred to one of these wards.

Persistent and impulsive attempts at self injury or at other acts of violence require that the patient be kept in bed most of the time with a nurse in attendance. Outdoor exercise may be continued provided a sufficient number of nurses are present to safeguard the patient. Care must be taken to avoid giving suicidal patients an opportunity to hurl themselves from high places or in front of moving vehicles. On returning to the ward the patient is immediately put in bed again.

All suicidal patients receiving medication by mouth must be observed carefully to be sure that the medication is actually swallowed. This is particularly true of hypnotic tablets which may be stored by the patient until a sufficient amount is available for suicidal purposes. Patients have been known to offer to nurses candy containing hypnotic medicine.

At least ninety per cent of accidents can be traced to negligence on the part of someone. When the above precautions are taken serious emergencies seldom arise, but however careful the nurse and others may be some accidents and emergency situations are inevitable. When they do occur the nurse should be so informed and trained that she will be able to act immediately and intelligently. A few seconds' delay may make the efforts to save life futile. In order to be thus prepared it will be necessary to know the following principles of treatment.

#### TREATMENT IN SPECIAL EMERGENCIES

In any emergency render first aid and have a physician notified. Hanging. Cut noose and place patient in recumbent posture. If this cannot be done, lift body so that neck is no longer constricted and summon aid. Do this immediately. Give artificial respiration. Throat cut. Grasp bleeding vessel with fingers. If this cannot be done exert pressure over bleeding vessel. Do this immediately whether hands are clean or not. Summon physician and do not relax hold on vessel until he so directs. Pack wound with sterile gauze, clean handkerchief, or whatever may be available. Combat shock.

Symptoms of shock (especially when due to hemorrhage). Dizziness, weakness, black specks before eyes, dimmed vision, swimming sensation of head, ringing in ears, nausea; marked restlessness, shortness of breath, yawning and unquenchable thirst; general pallor, lips and tongue blanched and dry, skin cold and clammy, beads of perspiration on forehead, breath cold; glassy stare of the eyes, pupils usually dilated; anxious expression of face; respirations shallow and rapid; blood pressure and temperature lowered. Stupor, coma and death may follow in close succession.

Treatment of shock. Eliminate or combat cause of shock when possible. In any case place in recumbent posture with head lowered. Wrap in blankets; apply heat but be careful not to burn the patient. Give stimulants unless contraindicated. Summon physician.

Hemorrhage. Capillary bleeding is manifested by slow oozing, venous by a steady flow, and arterial by spurting of blood at every heart beat.

Treatment: Exert pressure over bleeding point with sterile gauze compress. Elevate part. If this does not stop bleeding, apply a tourniquet above and below the bleeding point. A tourniquet should be loosened within an hour. Bleeding from one of the lower extremities is more effectively checked if tourniquet is placed around the thigh; if from one of the upper extremities it should be placed around the arm above the elbow.

Fractures. Indicated by deformity, unnatural mobility, loss of function, pain (tenderness), and crepitus (do not try to elicit this).

Make patient comfortable. Immobilize affected part with splint or at least keep it at rest. Call a physician.

*Dislocations*. Indicated by sickening or nauseating pain, deformity of joint, more or less swelling of parts around joint, movements of joint impaired and painful.

Place affected part in position most comfortable for patient. Use cold applications. Treat shock if present. Summon physician.

Sprains. Indicated by acute pain, nausea, faintness, immediate

swelling of part; movements of part accompanied by intense pain; more or less subcutaneous hemorrhage during first few hours or days.

Apply pressure and cold applications to affected part during the first twenty-four hours. Keep at rest and elevate if possible. Immobilize with splint if sprain is severe.

Asphyxia. Gas: Indicated by throbbing in head, dizziness, headache, muscular weakness; odor of gas on breath; occasionally nausea and vomiting; in severe cases unconsciousness, cyanosis, frothing at mouth and convulsions.

Drowning: Free lungs and air passages of water and other foreign substances; keep tongue pulled forward; give artificial respiration.

In case of either gas asphyxia or drowning do not give up efforts at resuscitation in less than two hours unless a physician so directs.

Foreign body in air passages: Use gag and hook out with fingers or remove object with a probang.

Unconsciousness. Common causes: Head injury, alcoholism, epilepsy, hysteria, syncope, apoplexy, sunstroke, drugs, asphyxia, uremia and diabetes. Treatment as prescribed by physician.

Convulsions. Causes: Hysteria, epilepsy, brain tumor, head injuries, general paresis and other diseases due to infections of the brain and meninges.

Treatment: Loosen clothing; prevent patient from injuring himself; insert gag between teeth to prevent biting the tongue.

Poisons. Poisons may be introduced by mouth, rectum, vagina, lungs, hypodermically, or intravenously. They may be solids, liquids, gases or mixtures. The action of poisons is rapid according to their diffusibility, concentration, amount and manner of administration.

Treatment for poisoning. With reference to those substances which most commonly cause poisoning the symptoms of poisoning as well as the treatment will be given.

Arsenic. Arsenous oxide. Most commonly used in murder and suicide as it is easily suspended in coffee, soup or any viscid fluid.

Symptoms: Within one-half to one hour faintness, nausea, incessant vomiting, burning pain in epigastrium, headache, diarrhea, thirst, pulse feeble, skin cold and clammy. Death may occur from within a few hours to four or five days.

Treatment: Produce vomiting; use stomach pump; give raw eggs, milk, limewater and castor oil.

Bichloride of mercury. Symptoms: Metallic taste, burning throat and stomach, lips and tongue white and shriveled, bloody stools, collapse, coma, convulsions.

Treatment: Give raw, finely chopped meat, white of raw eggs, milk; produce vomiting, wash stomach.

Opium (morphine and laudanum). Symptoms: In twenty to thirty minutes, giddiness, drowsiness, stupor, insensibility, stertorous breathing; weak pulse, pupils contracted. Patient can be aroused during early stages.

Treatment: Empty stomach and wash with weak solution of potassium permanganate (1–500); keep patient awake; give strong coffee.

Wood alcohol. Treatment: Wash stomach with large quantities of tepid water by means of stomach tube; give strong coffee; keep body warm and the head cool; give aromatic spirits of ammonia to overcome stupor or hold ammonia water near the nose to stimulate respiration.

Acids and alkalies. Symptoms: Immediate violent burning pain in mouth, esophagus and stomach; retching, vomiting, mouth shriveled and corroded, thirst, difficulty in swallowing; exhaustion, rapid pulse; cold, clammy skin; great suffering.

Treatment for acids: Do *not* use stomach pump or emetic; give *promptly* solutions of baking or washing soda; whitening, chalk, wall plaster, lime water, or soap and water freely; follow with milk, white of eggs, olive oil, thick gruel, and castor oil. Combat shock.

Treatment for alkalies: Do not use stomach tube or emetic; give promptly weak solutions of vinegar, citric acid, tartaric acid or lemon juice; follow with milk, olive oil, and white of egg. Combat shock.

Other poisons. For practically all poisons taken by mouth other than the acids and alkalies referred to above, the most important and first treatment consists in emptying and washing the stomach. This is done by producing vomiting, and by use of stomach tube or pump.

### CHAPTER XIV

# PSYCHOPATHOLOGY OF THE NORMAL

Among the greatest obstacles to preventive treatment are the misconceptions on the part of the general public in regard to mental disorders. Most people regard themselves as mentally "normal." They resent or become alarmed at any suggestion that they have characteristics in common with the mentally abnormal. In general, they regard those persons confined in institutions as representing the abnormal while those at large represent the normal. Unfortunately this artificial division is applied to all those who have at some time required institutional care. Life is thus made more difficult for about ten per cent of the general population. People seem to have a feeling that something mysterious has happened to such persons and they are thereafter ostracized from the normal group. Curiously enough, this ostracism may be prevented merely by calling a mental disorder a "nervous breakdown," although the two terms usually refer to identical conditions.

As a matter of fact, no person is, in all respects or at all times, entirely normal. The "average normal" is a theoretical being possessing an average of the characteristics of a great variety of more or less stable individuals. Among those included within the limits of the normal group are many who in some ways are definitely abnormal.

A person is usually judged by the laws, customs and beliefs current at the particular time. Imagine the reaction of modern society to an individual dressing and behaving in the fashion considered normal fifty years ago! Or imagine a person, fifty years ago, talking about airplanes and wireless communication! The limits of the normal group are so ill-defined that a person may become abnormal with respect to his usual normal condition and still be included with the normal group.

Approaching the subject from another viewpoint we find that each individual ultimately gratifies his cravings partly in the real world and partly in worlds created from his own fancy. Each person is constantly striving to dominate his environment. When the world

of facts offers obstacles which prove insurmountable gratification is eventually obtained from the world of fancy. The normal differs from the abnormal largely in the extent to which and the way in which gratification is obtained from the world of his imagination.

In the struggle to dominate the environment many devices have been elaborated by which the frank recognition or the expression of actual conditions is avoided. Some of the most common of these devices consist in a modification, rearrangement and combination of facts in a somewhat fanciful way with the result that their final representation provokes pleasure, even though the evident intent may be unpleasant. A transformation of this kind occurs in the anecdote about the barber, condemned to death, who, being granted the right to express a last wish, replied "I should like just once more to be allowed to shave the district attorney."

In other words, the mere facts of life are so monotonous and sometimes so painful that all persons depend upon fancy to aid at least temporarily in avoiding them. When this is not sufficient conditions may be made more tolerable through some playful representation. As the limits of the normal group are approached this representation sometimes ceases to be playful and become a serious misrepresentation.

All people obtain pleasure from the fanciful gratification of vain longings. Much of our appreciation of the work of poets and painters is due to their unusual ability to express such desires. The expression is enhanced by fanciful creations which the artist's own vain longings inspire. The classical love poems have been written by those who have thus idealized what they could not experience in reality. With the aid of experiences in abnormal mental states some have sought to express the tragic aspects of their lives. Edgar Allen Poe thus made use of the morbid, dream-like, delirious experiences which characterized his periods of intoxication.

The fanciful world, a product of the unconscious, is composed largely of memories of past experiences along with their associated emotions and instinctive longings. That part of the past which has left us with desires ungratified tends to be revived. Its frank expression often does not meet with social approval and it must find ways to circumvent repression. Study of dreams, of incidents forgotten, of mistakes in speech, reading and writing, and of the factors in a great variety of apparently accidental phenomena demonstrates

the close interrelation between the present and the emotional experiences of the past, the disturbance of conscious activities by the unrest in the unconscious. A person's name is forgotten because of the unpleasant associations which are revived by the person or the name. A slip of the tongue causes embarrassment because it betrays the actual truth. Promises are least often kept with those whom we dislike. In card games the mistakes usually represent an unconscious desire to lead or discard a particular card or the suit it represents.

It is probably unnecessary to call attention to the extent to which people are still influenced by innumerable superstitions. Superstitions about the number thirteen, breaking a mirror, having a black cat cross one's path, spilling salt, dropping a knife, fork, spoon, comb, or brush or beliefs that certain houses and graveyards are frequented by ghosts, are common to all civilized people. Superstitions are essentially traditional fancies and are closely related to magic, fairy tales and myths. All of these have their source in the unconscious of the race while dreams and personality disorders reflect the unconscious of the individual.

A common personality characteristic which greatly influences our lives is a feeling of insecurity or what is technically called a feeling of inferiority. For each individual there are certain situations in which he feels peculiarly insecure. While this kind of feeling is experienced by all of us very few have a knowledge of its source or of the associations which cause it to persist. Whatever the manifestation may be, careful study of this type of feeling reaction reveals that it has its origin in a sensitiveness to personal handicap. This may be some physical peculiarity, a lack of intellectual or social training or an inability to profit by the opportunities afforded by such training. A person with a deformed hand is continually trying to conceal the deformity. One with modest intellectual capacity is embarrassed by situations which he cannot readily comprehend. The handicap may be only relative as is the case in a family where there are marked discrepancies in the ability of different members. The degree of sensitiveness to personal deficiencies is often shown by the resentment at any reference made to them.

Of still greater importance are the more or less unconscious strivings to conceal deficiency by representations of efficiency or even superiority. By means of these strivings a person may *compensate* for deficiency by some form of excellence. Such a *compensatory*  striving is well illustrated by the efforts of Edward Payson Weston to overcome the handicap of a weak and sickly childhood. When he was eighteen he began to take physical exercise in the form of walking and at the age of seventy-two he walked from New York to San Francisco in 104 days. Likewise Helen Keller has compensated for her blindness by training other special senses to an extraordinary degree. Physically unattractive individuals may strive to compensate by intellectual and social excellence. A coward sometimes adopts the mannerisms of a ruffian or a fighter. A young man really dubious of his sexual prowess gives exaggerated accounts of his vigor. By the same type of striving a mentally sick person may compensate for actual poverty by developing a delusion of great wealth.

Sensitiveness due either to actual inferiority or to a feeling of inferiority often leads to the development of attitudes and habitual reactions by means of which the weakness is shielded from observation. A mediocre musician, for example, refuses to perform in the presence of an artist in order to avoid unpleasant comparison. A person may resent correction or refuse instruction because he thus acknowledges deficiencies concerning which he is sensitive. He may show his sensitiveness by being unusually ready to give explanations or excuses for mistakes and by outbursts of feeling when his motives are questioned. One who habitually strives to shield personal deficiencies, and who resents any attempts at inspection of himself, is said to be "on the defensive." Such a person shows what is technically called a defense reaction. In mental illness this sort of a reaction is manifested by suspiciousness, aggressiveness and by delusions of persecution.

As a result of actual inferiorities or feelings of inferiority we find within the normal group a number of different personality types. Some of them are obviously eccentric and all of them present in mild degree the characteristics of psychopathic personalities.

Many individuals have characteristics which resemble those of the mild forms of affective psychoses. Some are more or less consistently active, talkative, alert, tense, aggressive, jovial, cheerful, facetious, flighty, domineering and erratic. They may display unusual initiative, spontaneity and restlessness. Such individuals are referred to as possessing a manic or hypomanic temperament. Many of these characteristics are seen in the usually good natured, neighborly type of woman, who adds to the sociability of the community by promptly

conveying current gossip, who compensates for lack of original ideas by an excessive amount of flighty talk and who takes an active part in managing other people's affairs. Men of a similar type may devote themselves to a number of women or indulge in a variety of dissipations or become leaders of small groups in the community. With a somewhat higher grade of intelligence and training individuals of this temperament usually become successful and influential citizens. They are good salesmen or promoters and they take a leading part in social organizations. A fortunate combination of the traits of the hypomanic temperament together with superior intelligence and training contributes largely to the success of some of our most distinguished citizens. A few have not only an unusual amount of energy but also the capacity to utilize this energy consistently and efficiently in pursuing careers which lead to great accomplishment. An example of this type of person is seen in one of the most popular and distinguished presidents of recent times, Theodore Roosevelt.

Another common type of personality presents many of the characteristics of a mildly depressive conditions. A person of this type is inclined to be deliberate or even sluggish in talk and action. He may be retiring, dependent, pessimistic, inclined to worry, and lacking in initiative and spontaneity. He readily drifts into modest, methodical and even dependent ways of living. He takes a passive interest in social activities, clings tenaciously and with much effort to rather modest hopes and ambitions and is only temporarily aroused by anything unusual. Such a person is sometimes referred to as having a depressive temperament. Even though he possesses average intelligence and training he often lacks the energy and initiative necessary to compete with others. He is deficient in those personality traits which make others socially attractive. On the other hand, some of these characteristics along with superior intelligence and training are found in those conservative and judicious individuals who calmly observe the ever changing notions and customs of other people and carefully refrain from adopting anything new until after due consideration it is found to be substantial and rational. Such individuals become conspicuous for their good judgment, sound principles and excellent foresight. They often exert a useful and necessary balancing influence in the community. Sometimes these qualities are the dominating characteristics of great leaders. Abraham Lincoln is a striking example of this type of personality. He

was successful in spite of the fact that during periods of great personal stress his depressive tendencies became manifest to a degree which was really psychotic.

A large proportion of the general population exhibit tendencies to periods of mild elation which alternate with similar periods of mild depression. These cyclical changes appear to have something in common with the alternation of being awake with being asleep, of summer activity with winter hibernation, in that they are illustrative of the rhythmic patterns of all living organisms. With some persons the depressive phase is more prominent and the swing in the direction of elation is not sufficient to attract attention. With others the elated phase is more prominent and the depressive phase negligible. Such oscillations in mood are characteristic of a cyclothymic temperament. While mildly elated the person's judgment is somewhat impaired and there is likely to be extravagance in the expenditure of money and energy. With little reflection the elated person gets himself involved in undertakings which will later be a source of chagrin and self depreciation when he becomes depressed. Anxiety may complicate the depressed phase. People and things then seem cold and distant and the person may feel that he is being deserted. Suicidal thoughts and impulses may be troublesome. These changes are really a mild form of the circular type of manicdepressive psychosis.

A fairly common type of personality shows in mild degree some of the characteristics of paranoid individuals. A person of this type is unusually sensitive, irritable, easily offended and critical of others although quite intolerant of criticism of himself. He is likely to be cynical, insubordinate, on the defensive and inclined to suspect the motives of others. He tries to give the impression of being superior to the average and invariably places the responsibility for his own errors on others. He finds fault with his environment, agitates changes and opposes anything or anybody inconsiderate of his personal whims and fancies. Such a person is said to have a paranoid temperament or to present a paranoid attitude toward life. His influence may be responsible for chronic discontent in an organization or a community. Some of the least desirable of this type become anarchists or assassins. Guiteau, the assassin of President Garfield, is an example of this personality type. Guiteau came from a rather unstable family and as a youth was unmanageable. He brooded, was egotistical, irritable, cowardly and unfriendly. His father, a religious fanatic, used to punish him cruelly in attempts to force him into submission. The boy Guiteau did not profit by this kind of discipline and there grew within him an active feeling of antagonism toward his father. After a short period in college he devoted himself irregularly to religious fanaticism, the study of law and writing. He was considered by his associates to be persistent, bigoted, selfish, dishonest and sexually perverse. He was divorced because of adultery and was dismissed from his church on charges of immorality. At the age of thirty he said that he would some day gain notoriety by shooting a public official. He became interested in an heiress a short time after he had made some inconsequential speeches in favor of Garfield's election. He sought from Garfield an appointment to a public office, believing that when he had obtained this honor the heiress. whom he had never met, would marry him. When his request for an appointment was refused, he brooded for some time before arriving at a conviction which he felt was an "inspiration from God." This inspiration directed the "removal" of Garfield. For several weeks he planned the assassination and finally, at an opportune time, he approached Garfield from the rear and fired two bullets into his back. This happened nine years after he had said that he would gain notoriety by shooting a public official. His distorted thinking led him to believe that after the assassination he would be acclaimed a hero. Although there can be little question that he was a paranoid, he was legally considered to be within the limits of the normal group and was hanged.1

Not all individuals with paranoid dispositions are disagreeable and undesirable citizens. A superior type of individual having paranoid traits may become a distinguished leader, because of unusual analytic capacities and the courage to make important and desirable social changes which are in opposition to popular opinion, prejudice and custom.

As has already been stated, very few persons suffering from psychoneuroses are excluded from the normal group. It is not an exaggeration to say that a large proportion of the general population possesses neurotic or psychoneurotic traits. As a rule the individuals of this type are very much interested in themselves, display themselves dramatically, choose their numerous complaints as topics for con-

<sup>&</sup>lt;sup>1</sup> Fenning, F. A.: The trial of Guiteau, Amer. Jour. Psychiat., 13:127.

versation and obtain satisfaction from poor health. They dominate their environment by requiring the attention and care of sympathetic but misguided friends and relatives. Under unusual stress their traits are accentuated to the point of becoming symptoms of illness. In spite of these tendencies, the majority with psychoneurotic personalities live rather useful lives. Some are prominent and successful. Darwin suffered from anxiety neurosis for forty years. His distress was so great that he was unable to work for several months at a time. During these forty years, however, he made observations and discoveries and arrived at conclusions which led to the formulation of his theory of evolution.

Perhaps the most common deviation from the normal is found in what is popularly called sexual perversion.<sup>2</sup> By this is meant some anomaly or retardation in psychosexual development. Widely different opinions have been expressed as to the nature and causes of psychosexual deviation. Some claim that it is inherited and constitutional while others insist that it is acquired. As yet there is insufficient evidence to support either claim but it is probable that all of these factors enter in some degree in every case.<sup>3</sup>

A brief review of the normal psychosexual development will call attention to the ease with which deviations may arise. The interests in infancy are entirely narcissistic. They are centered largely in nutrition, and this of course usually necessitates intimate physical contact between the baby and the mother. By means of this contact the baby begins to differentiate between the mother and other people.

The chief source of pleasure at this time comes through oral activities. Incidentally the infant gains much knowledge of its own body and of the external world through sucking and biting. The tendency to put objects in the mouth persists even in adult life, long after the mouth has ceased to be an efficient means of testing reality.

Before the child is a year old his attention is called to other parts of his body through training in habits of cleanliness. Several hours of each day are spent getting the proper amount and kind of food

<sup>&</sup>lt;sup>2</sup> Fenichel, O.: The sexual perversions, Psychoanalytic Quart., 2: 260. Ellis, H.: Psychology of Sex, New York, 1935.

<sup>&</sup>lt;sup>3</sup> Henry, G. W.: Constitutional factors in psychosexual adjustment, Assoc. Research Nervous and Mental Disease, Vol. 14, p. 287.

Psychogenic factors in overt homosexuality, Amer. Jour. Psychiat., 93:889.

ingested and its residue eliminated. When the interest of the parents is added to that of the child in its oral and anal activities a lasting impression of their great importance is inevitable.

While others are thus occupied with vital functions the child is discovering ways in which he may gain pleasure from his own body and he learns much from his intimate contacts with others. As he grows older the pleasure associated with the use of certain parts of the body gradually takes on a sexual coloring. The sexual elements in this pleasure are seldom clearly recognized as such and formal training tends to obscure their sexual value. The child is a helpless victim of servants and older members of the family who indulge in sex play with the child or in his presence. He is frequently aroused by kissing and hugging even if he escapes frank sexual fondling. He is also a victim of parental conflicts which emphasize Oedipus relationships.

In view of the many opportunities for the association of sex pleasure with all sorts of apparently neutral activities it is not surprising that only a small proportion of the population achieve and maintain adult heterosexual relationships. During early childhood, boys and girls usually associate with each other as though there were no important difference between the sexes. Later the differences in interest and in the capacity for physical activity tend to keep the sexes separated. Boys tend to associate with each other and girls choose members of their own sex as companions. puberty is approached an increasing difference between the sexes is appreciated. Finally the adolescent love affairs play a prominent rôle in the adaptation of the individual to the more responsible relationships of adult life. In other words the normal psychosexual development begins with a narcissistic period which is followed by a homosexual period before an adult heterosexual adjustment is undertaken.

Many exceptions to this normal development have been observed. In the so-called perverse individual the sexual development is arrested either on account of inherent inferiority or through unfortunate fixation of sexual interests. An example of the latter is seen in a young man who had as his usual stimulus for sexual excitement the gloved hand of a woman. He recalled that at the age of seven he had had pleasant sexual feelings while walking with his older sister and holding her gloved hand. This experience was repeated so many. times that eventually the mere sight of the gloved hand of a woman caused him to become sexually excited, although the usual means of sexual attraction did not interest him. In this case the gloved hand is technically called a fetish. Sexual excitement and gratification by means of a fetish is called fetishism.<sup>4</sup> Another young man as a child became abnormally attracted by the feeling of flesh through playing with his uncle's naked toes. Later in life he showed a form of sexual perversion which manifested itself by a morbid, homosexual passion for the feeling of flesh. Some individuals are sexually attracted by children. We occasionally read in the papers that a child has disappeared and later that it has been murdered by a sexual pervert. The murder is usually committed in an attempt to compel submission or to conceal the assault.

Such criminal acts are sometimes a manifestation of sadism, a morbid desire to inflict pain on others and thereby experience sexual pleasure. This sexual deviation is the counterpart of masochism, a morbid desire to experience pain because it is associated with sexual pleasure. These sexual deviations may appear difficult to understand but they are often a result of accidental associations. Sadism is an expression of the primitive capture and subjugation of the female and masochism is a survival of a primitive form of submission. In our present state of civilization capture and subjugation is ordinarily confined to adolescent fantasy but past associations of pain with sexual pleasure and inability to obtain adequate gratification from normal sexual intercourse not uncommonly cause a reversion to sadistic and masochistic relationships.

Transvestitism or eonism,<sup>5</sup> a morbid desire to wear the clothing of the opposite sex, may be equally puzzling but it also is a natural outgrowth of the past experiences of susceptible persons. A chemist who has two children and has been twice married has a morbid desire to wear female attire. His parents wanted a girl when he was born and his somewhat feminine appearance and manner contributed to the joy they experienced from keeping him in dresses until he started to school. He still visualizes this period as the most happy in his life and never recovered from the shock of being compelled to wear

<sup>&</sup>lt;sup>4</sup> Kronengold, E. and Sterba, R.: Two cases of fetishism, Psychoanalytic Quart., 5: 63.

<sup>&</sup>lt;sup>5</sup> Horton, C. B. and Clarke, E. K.: Transvestism or eonism, Amer. Jour. Psychiat., 10: 1025.

boy's clothing when he started to school. He still insists that a person should be permitted to dress according to preference regardless of the sex. The desire to wear the clothing of the opposite sex is related to a more gross deviation in which a person takes medication and has operations performed in the hope of being transformed into the opposite sex. A desire to be thus transformed is not associated with any obvious structural anomalies of the sex organs although heterosexual adjustment is poor and there are suggestions of what might be called physiologic and psychologic pseudohermaphroditism.

Morbid sex deviations such as the desire for relations with the dead, with animals or desires which involve the use of bodily excretions are rare and need only be mentioned. The desire to expose the genital organs, however, is not uncommonly carried into action. This exhibitionism is the counterpart of the desire to spy on others in the nude, or voyeurism. In sublimated form both of these tendencies are practically universal. Under the guise of seeking the benefit of the sun's rays and of enjoying the beauty of the human form they gain frank expression in nudism. The objection to nudism that it may lead to heterosexual promiscuity has little basis because clothing usually adds to sexual attraction. As a matter of fact a large proportion of the nudists are narcissistic and homosexual in their interests.

Homoerotism, or the excessive desire for intimacy with a person of the same sex, carried into action results in homosexuality. A century ago a home with children was practically a necessity and the father somehow managed to provide for his family until the children were able to care for their parents. Children are now a liability and we are approaching a state in which marriage is a hazardous undertaking unless both parents are employed. With this social and economic change the tendency to revert to substitutes for adult heterosexual relations has increased and homosexuality is being recognized as a normal mode of gratification for those so inclined. Officially it is still the most tabooed of sexual topics but actually a large number of persons are at least flirting with it. A well known author recently remarked that a play is not likely to be popular with a metropolitan audience unless subtle reference is made to homosexuality.

The interest in homosexuality would have little more than academic value for physicians if it were not for the fact that many general medical situations have homosexual problems in the background and

that the conflict over homosexuality is one of the most frequent causes of personality disorder.<sup>6</sup> Occasionally the conflict results in suicide or homicide. The murder of Richard Loeb called attention to homosexuality in penal institutions, to conditions which are ordinarily concealed from the general public.

Homosexuality is so ill-defined that it is difficult to make any general statements about it. All human beings are to some extent homosexual in their interests. Whenever the sexes are segregated the tendency to homosexuality becomes manifest and there are few persons who have not had homosexual experience. In childhood or during adolescence many are taught homosexual practices by older perverts, sometimes friends of the family or even relatives. They may be fascinated with these experiences and in time sexual attraction is confined to members of their own sex. Effeminate boys and masculine girls are especially prone to homosexual attachments. In non-coeducational schools and colleges the tendency toward the formation of "crushes" is noticeable. Few of these result in complete sexual gratification but the tendency to homosexual fixation is often increased by these experiences.

A male homosexual may retain throughout his life so great a fondness for his mother or a sister that he is unable to transfer his affections to another woman. Likewise the attachment of a female homosexual for her father or brother often is a factor in preventing her from loving any other man. Sometimes the affectionte attachment to a parent lives on in the marriage to a much older person who becomes a substitute for the father or the mother. Whether it is due to external circumstances or inherent deficiency the failure to be attracted toward the opposite sex leaves the individual but little else than homosexuality or some other compromise. Marriage with a homosexual seldom brings happy results because the striving to be normal may be excessive and the tendency to revert to old habits is too great.

In addition to the frank homosexuals or those who indulge in overt homosexual relations, there are a larger number of effeminate men and masculine women with latent homosexual tendencies which they manage to suppress or sublimate. A rather harmless type of effemi-

Fenichel, O.: Neuroses related to perversion, Psychoanalytic Quart., 2:562.

<sup>&</sup>lt;sup>6</sup> Henry, G. W.: Psychogenic and constitutional factors in homosexuality. Their relation to personality disorders, Psychiat. Quart., 8:243.

nate man always dresses with exquisite taste, has charming manners, and is thrilled by afternoon tea parties, where he is sought on account of his ability to engage in light conversation. The homosexual masculine woman on the other hand strives to imitate the masculine as much as possible in her style of dress, manners and habits. She likes to promote the rights of women and looks upon marriage with disfavor because it does not afford a career. Many such individuals gratify their desires vicariously by bestowing maternal affection upon pet animals. When married their homosexuality may manifest itself in the form of frigidity or even in disgust for sexual relations. Homosexual men and women may enjoy a Platonic relationship with each other because heterosexual desires are not felt and therefore neither one is embarrassed by the advances of the other.

Some homosexuals are greatly distressed by their tendencies and life for them means a constant struggle against yielding to their desires. When the temptation is too great or on the other hand when a situation arises in which normal sexual relations are required the feeling of insecurity may be so great as to provoke what is known as a homosexual panic.

Even when normal sexual interests have been developed the homosexual may exhaust himself by excessive indulgence. Such a person may gain the reputation of being a Don Juan. In his anxiety lest his potency fail he is driven to sexual activities which even the normal could not endure.

If the homosexual is unable to control his desires and if he happens to be socially prominent he may be in constant danger of being exposed. For instance, a lawyer had to be accompanied by his wife in order to avoid getting into difficulty. On several occasions, when alone, he was inveigled into homosexual relations with a sexual pervert who was the agent or stool pigeon of a group of men. According to a pre-arranged plan he was caught in the act by these men and then blackmailed to the extent of several thousand dollars.

Other individuals are in conflict over their homosexual tendencies. They are harassed by the feeling that people suspect them of being abnormal. They may come to feel that others are scrutinizing them and talking about them. In other words some homsexuals become paranoid in their attitude and may even become psychotic.

The sexually perverse tend to eliminate themselves since they are less likely to reproduce than the normal. Some may feel that such a

goal is desirable because of the menace to persons who might develop normally. But when the large number of artists who are homosexual is taken into consideration it is difficult to justify this attitude. It is nevertheless true that the extent to which mature development of the sexual instinct is inhibited by abnormal or perverse sexual habits, determines a person's biological inferiority and his incapacity for normal adult functions. Civilized people are much more tolerant of sexual perversions than are savage tribes, some of which have strict prohibitions and at times a death penalty for a single transgression.

Much has been written and advice freely given regarding masturbation. The ancient Greek physicians taught that the fluid in the cavities of the brain contained nervous energy which was transmitted to the various parts of the body by the nerves. In time the belief was developed that there was a direct connection between the genital organs and the brain via the spinal cord and that the loss of seminal fluid meant a loss of nervous energy. Hence we still have the superstition that masturbation leads to mental illness or to softening of the brain.

In recent years there has been a tendency to dismiss apprehension regarding the evil effects of masturbation as a residual of this superstition. Aside from the fact that most superstitions represent actual values in human experience, there is abundant evidence for regarding masturbation seriously. It is an experience which we all have had in one form or another and it seems to be a part of normal development. It is also a part of our experience to have to deal with superstitions and with moral codes. No two persons are alike in their potentialities for development or in their experiences. Any habit can, of course, be carried to excess and pleasurable experiences tend to be repeated. There is always some risk that masturbation may be continued in preference to adult heterosexual relations.

Masturbation does not differ from other substitutes in this respect. They may not only interfere with the establishment of adult relations but may also prove too tempting if adult experiences are disillusioning. A small proportion of the population through inherent deficiencies and exposure to environmental influences<sup>8</sup> have been thwarted

<sup>&</sup>lt;sup>7</sup> Malamud, W. and Palmer, G.: The rôle played by masturbation in the causation of mental disturbances, Jour. Nerv. and Ment. Dis., 76: 220.

<sup>&</sup>lt;sup>8</sup> Henry, G. W.: Psychogenic factors in overt homosexuality, Amer. Jour. Psychiat., 97:889.

in normal psychosexual development. At least some of this group may remain better adjusted if they are permitted to continue with a substitutive form of gratification. In any case the physician should make a thorough psychiatric investigation before venturing to suggest a solution of a problem involving psychosexual deviation.

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Many other types of deviation from ideal normal standards could be described but it will better serve the purpose of this book to mention the abnormalities of a number of famous persons who have been regarded as normal.

Ampere—physicist, mathematician, naturalist—was unable to express his thoughts unless he walked constantly and kept his body in perpetual motion.

Balzac—often lived in places unknown to his friends and relatives, believed his writings would reform the world, was always talking about himself and "one evening when he had put on a new dressing gown wanted to go into the street with a lamp in his hand to excite the admiration of the public."

Beethoven—would use several pitchers of ice water to wash his hands and face. He splashed it about so much that the ceilings below were frequently stained.

William Blake—subject to violent outbursts of anger and to alternating states of depression and elation. He saw visions of angels and devils and he believed that he was "commanded by the spirits" to write. Toward the latter part of his life he was inclined to be suspicious of the motives of others.

Elizabeth Browning—poetess—a neurotic invalid most of her life, subject to fainting attacks. Spent several years in bed.

Bunyan—as a boy had no equal for lying and swearing. Indulged in all kinds of vices and had recurrent psychoses during which he saw evil spirits in monstrous shape and fiends blowing flames out of their nostrils. Pilgrim's Progress is an excellent description of his psychosis.

Lord Byron—often melancholy, sometimes imagined he was visited by a ghost. There was no excess in which he failed to include.

Jerome Cardan—sixteenth century philosopher, mathematician and physician. He was unusually superstitious and believed that he possessed magic power. He was both self-indulgent and masochistic. "I considered that pleasure consisted in relief following

pain... accordingly I have hit upon the plan of biting my lips, of twisting my fingers, of pinching the skin of the tender muscles of my left arm until the tears come." He also tried to overcome grief by torturing himself. At various times he had visual and auditory hallucinations. During the latter part of his life he believed that he was a victim of innumerable plots and "the subject of calumny and malicious slander."

Chopin—during his whole life suffered from excessive "nervousness" and was perpetually tormented by such trifling things as a "wrinkle in a rose-leaf."

Auguste Comte—during a mental illness lasting nearly two years he was unusually irritable and committed acts of violence upon his wife. On one occasion he tried to drown her as well as himself. It was after he recovered from this attack that he wrote his famous system of philosophy.

Cowper—English poet of the eighteenth century—alternating periods of elation and depression. At one time so buoyant he fancied he could not die. Attempted suicide many times. Spent greater part of his life with the conviction that he was unalterably condemned to hell. While depressed he described himself in verse:

"Man disavows and Deity disowns me, Hell might afford my miseries a shelter; Therefore, hell keeps her ever-hungry mouths all Bolted against me."

Oliver Cromwell—had violent attacks of bad temper and once had a vision in which a woman of gigantic stature prophesied he would be the greatest man in England.

De Quincy—was a drug addict, had oppressive dreams, periods of insomnia and depression. During a psychosis in which he hallucinated, he set fire to his books and papers.

Descartes—often was followed by an invisible person directing him to pursue the search of truth.

Dostoievsky—was an epileptic and suffered from morbid fears that something terrible was going to happen to him.

Mary Baker Eddy—subject to recurring hysterical attacks which were characterized by convulsive seizures, states of general contracture or a condition in which she lay motionless for hours. She heard spirit rappings in the wall and believed that she was persecuted chiefly by former pupils with whom she had quarreled. She believed

that they were trying to rob her of her power through the influence of "malicious animal magnetism." Finally after she had failed in a number of lawsuits against them she was convicted of the crime of organizing a conspiracy to kill one of her imagined persecutors and was sentenced to pay a fine.

Fechner—physicist and philosopher—suffered from insomnia, had attacks of prostration, obsessive ideas, became weary of life and was considered psychotic by his friends.

Paul Gauguin—a psychopathic descendant of the Borgias. In order to devote himself to painting he suddenly gave up a successful business career and thereafter was unable to support his wife and five children. He spent several years with primitive people in the tropics and was most happy living as the husband of a thirteen year old native of Tahiti. As his health failed from disease and dissipation he made an unsuccessful attempt at suicide and then resorted to the use of drugs.

Goethe—wrote much of his poetry while in a state resembling somnambulism. He had periods of depression with hypochondriasis and suicidal tendencies alternating with periods of extreme joy.

Haller—celebrated physiologist—was a drug addict and developed ideas of persecution.

Dr. Samuel Johnson—was hypochondriacal, irritable and gloomy most of his life. His entrance to a doorway was anxiously calculated so that he always took the first step with the same foot. If an error was made he had to retrace his steps and begin again. While musing he sat moving his body forwards and backwards. He had the habit of making peculiar chewing, clucking or whistling sounds in the intervals of articulation.

Keats—homosexual—had many hypochondriacal attacks. A brief period of hilarity was followed by a depression in which he was haunted by a universe of wanton cruelty.

Charles Lamb—makes the following comments upon his psychotic attacks:

"My life has been somewhat diversified of late. The six weeks that finished the last year and began this, your humble servant spent very agreeably in a madhouse, at Hoxton.

"Dream not, Coleridge, of having tasted all the grandeur and wildness of fancy till you have gone mad."

<sup>&</sup>lt;sup>9</sup> Dakin, E. F.: Mrs. Eddy, New York, 1929.

Guy de Maupassant—a drug addict and otherwise dissipated. He failed to recover from a depression at the age of thirty-six, developed delusions of grandeur and died seven years later after a series of convulsions. During the nine years prior to his mental illness he published thirty volumes of his writings.

Michelangelo—was petty, suspicious and subject to violent outbursts of temper. After he had received an injury through a fall he shut himself up in his room and forbade anyone to come near him.

Mohammed—an epileptic who saw visions and heard voices and was regarded as being mad.

Mozart—a musical genius who in the last months of his life saw constantly standing before him a man commanding him to compose his own requiem.

Newton—illustrious astronomer and mathematician—had a psychosis at middle age characterized by confusion, depression and delusions of persecution.

Nietzsche—was confined to institutions several times and spent the latter part of his life in a chronic psychosis.

Pascal—distinguished philosopher, mathematician and author—was psychoneurotic all his life, suffered from pain, weakness, headache and digestive disturbances. From infancy he could not bear seeing his parents near each other. While composing he often sprang from his chair on seeing a fiery gulf opening by his side.

Rossini—composer—during the latter part of his life suffered from insomnia, was depressed, had fits of weeping, attacks of despair and suicidal impulses.

Schiller—poet and dramatist—"when he wanted to meditate he would put his feet on ice and sniff the aroma of fermenting apples."

Schopenhauer—philosopher—felt there was a demon within him, would not speak to anyone for weeks at a time and had violent fits of rage. He broke an arm of a hotel proprietor who spelled his name incorrectly. He developed the delusion that there was a conspiracy against him and it is believed that he committed suicide.

Schumann—many attacks of elation and depression. While elated he writes: "I have been composing so much that it really seems quite uncanny at times. I cannot help it and I should like to sing myself to death like a nightingale." In his depression he was unable to remember his own music long enough to write it down and he fancied he heard spirit voices rebuking and praising him. Once he

rose in the night to write down a theme given him by the ghosts of Schubert and Mendelssohn. He spent the last two years of his life in an asylum after having jumped from a bridge into the Rhine.

Shelley—was psychopathic. Several times a day he plunged his head in cold water and then exposed it recklessly to the intense heat of fire or of the sun. A somnambulist who saw visions and had melancholy periods during which he talked of suicide.

Socrates—showed his habitual asceticism by going barefoot even in winter, wearing the same garment summer and winter and being content with bread and water. He had ecstatic periods which were accompanied by auditory and visual hallucinations and later in life he believed that from a distance he could influence by magnetism the young people who followed him. In spite of this he was an exponent of reason, philosophy and virtue.

August Strindberg—novelist—a psychopath who had numerous tragic love affairs, including three marriages. During the early part of his life he sought a mother substitute in his wife but later he wished to have a daughter substitute. Associated with these tragic experiences he had several psychotic attacks characterized by suspiciousness, hallucinations and suicidal attempts. He was always inclined to brood, suffered from an extreme sense of guilt and believed that happiness was a sin.

Swedenborg—a foremost pioneer in scientific investigations which were terminated by an acute mental illness at the age of fifty-six. For nearly thirty years afterwards he believed he was persecuted by unseen agencies, mocking voices, evil odors, nauseous tastes and hideous spectres. It was during this long period of mental illness that he produced his religious writings for which he is best known and which led to the establishment of the Church of the New Jerusalem.

Swift—the greatest of English satirists—did not speak, read or recognize anyone for a year, either refused to eat or ate standing up, became furious when anyone entered his room and died in a mentally deteriorated condition.

Tasso—poet—became depressed, developed delusions of persecution, had visions, heard voices and imagined himself covered with unclean beasts.

Tolstoy—had an irresistible desire to fly, made flying movements from the window of his room, beat himself with a rope and whip with the idea that if he accustomed himself to pain he could never be unhappy, became depressed and resorted to various devices to avoid killing himself.

Tschaikowsky—composer—spent his life dreading women but his friends suggested marriage. He proposed impulsively, hoping in vain to be rejected. He referred to his marriage as "something horrible." In a few days he became despondent and attempted suicide.

Vincent Van Gogh—great Dutch painter of the nineteenth century—an eccentric individual who gradually withdrew from the more usual social contacts to find solace in his painting and the company of prostitutes. During the latter part of his life he was subject to violent attacks of mental illness on account of which he spent long periods in an asylum. Just before his first attack at the suggestion of a prostitute he cut off one of his ears and sent it to her as a present. He finally committed suicide.

Voltaire—was neurasthenic and hypochondriacal practically all of his life.

Richard Wagner—a psychopath who had a violent temper, was ruthless in his love affairs and regarded starvation as only a detail in his scheme of life. From childhood he suffered from terrifying night-mares and even at the age of nineteen he buried himself in the bed-clothing because of his deadly fear of ghosts. He had an almost irresistible craving for soft fabrics in contact with his skin, a passion for gorgeous colors and an inordinate desire for finery.

Oscar Wilde—imprisoned for having seduced a wealthy youth. Later in life when deserted by this youth he complains pitifully: "He led me first to the street, introduced me to the male prostitution of London...He has ruined me, soul and body...He has broken me—the man I loved; my very heart is a cold weight in me."

Many individuals of modern times could also be selected as examples. As a rule a person betrays his fundamental interests and liabilities by what he says and does. The abnormal characters in literature are often the creation of writers who are psychopathic and who thus give expression to their own pathological feelings and inclinations.

## CHAPTER XV

## MENTAL HYGIENE

An adequate discussion of the principles of mental hygiene would far exceed the limitations of this book. Comment will therefore be made upon only the more important considerations. In order to approach the subject more directly very little reference will be made to physical hygiene, a subject familiar to all of us. It will be assumed, however, that any consideration of mental hygiene will always include physical hygiene, since proper food, elimination, fresh air, exercise, recreation and rest are an essential part of mental hygiene.

Mental hygiene is that science which deals with the principles of mental health. Its practice requires the cultivation throughout life of those habits of thinking, feeling and action which are conducive to personality stability. The practice of mental hygiene prepares us to deal effectively with the stresses of life. It fortifies us against failure and sickness. It helps us to acquire the resources necessary to master any situation, however trying it may be. It affords the greatest protection against personality disorders or mental illnesses. The chances of applying mental hygiene principles effectively are greatest during infancy and childhood.

When we consider the many adverse influences under which most of us grow and become socially useful individuals, it is remarkable that such a large number survive. At the time of conception the parents are often unfit and have little regard for possible offspring. Some of us were unwelcome, some had partial or no parental care and few have had a satisfying home life. Some were handicapped with the burdens of poverty while others suffered from the influences of luxury, the companionship of servants and the tutelage of governesses. Very few of us were reared in accordance with the principles of good mental hygiene.

If we could start life over again as infants and were able to apply these principles in our development we would undoubtedly be heathier and happier. As we journeyed through life we would pause now and then to inspect and modify certain tendencies which were prone to develop into unhealthful habits. We would observe that each of us was striving to dominate his environment by either fair or unfair means. We might be able to foresee the goal of such strivings, the winning of the admiration, affection and respect of others, or a maladjustment which would require others to make allowance for us. We might also anticipate a state of dependence or invalidism through which we compelled others to share our troubles.

Since we were born through no choice of our own we might expect our parents to welcome us and to give us every possible chance to develop normally. This would include an atmosphere of understanding and affection in which other members of the family made an effort to appreciate our point of view. We would expect them to take an active, intelligent interest in our development which should need no other stimulus than their affection for us. We would look to them for guidance although we would prefer to learn from our own experience as long as it was not too dangerous to do so. We would expect our parents to understand that as infants our chief needs are proper food, exercise and sleep along with training in regular habits of sleeping, eating and elimination. We would expect them to understand that these early years are the most impressionable and the period of most rapid learning. We will never again be quite so distractible and we are very curious about anything new which enters the field of our attention. Each day new experiences come to us through every possible channel and we frequently need help in adjusting to them.

We would hope that our parents might understand our apparent precocious emotional development. Although we are not yet able to express our feelings in language we are exceedingly sensitive to the attitude and affections of others. We seem to respond instinctively to any expression of feeling quite unaware that the affectionate relationships established during infancy and early childhood in large measure determine the instinctive and emotional pattern of later years.

On this account our inclination to become emotionally attached to one member of the family would not be encouraged. We would not be exposed unduly to the caresses of relatives and friends nor would we participate in any differences of opinion involving us. We would not be taken up, held or carried simply because we cried loudly and angrily for this form of indulgence. We would be given due praise for good conduct and our mistakes or misbehavior would be ignored as much as possible. The preferred mode of behavior would be made sufficiently attractive so that we would choose to follow it. Coercion often obtains merely social conformity and leaves an underlying feeling of rebellion which may be a handicap throughout life.

During early childhood our needs, desires and interests increase rapidly as well as do the number of things, persons and situations to which we must adjust. We would be given opportunity to spend our play time with other children of approximately our own age. We would be encouraged to take the initiative in directing our own activities and in settling our problems. In this way our development would not be distorted by undue interest in the affairs of older people. We would learn early in life that a certain amount of sacrifice of selfish interests is necessary in order to "get along" with other people. We would also be cultivating habits through which we might obtain freer expression of our personalities, without too much conflict with the interests of others.

We would need help now and then in finding approved modes of self expression. Whenever possible we would be permitted to choose our course of action. Implicit obedience keeps us in a state of dependence and we would rather be dynamic, active, searching children even though somewhat difficult to manage. If as much effort were spent in studying our problems as is ordinarily spent in trying to solve the problems we create our management would not be so difficult.

We would appreciate a greater regard for our play activities as they are as important to us as the serious business of the adults. We would rather not be interrupted unnecessarily.

We are inclined to choose our goals unwisely and we would appreciate the assistance of adults. The selection never would be arbitrary but such as might be incorporated in our life patterns. When a goal was chosen we would be encouraged to attain it in spite of obstacles.

We do not thrive on unreasonable denials or arbitrary "don'ts." As a matter of fact these negative directions seem to provoke misbehavior. If our needs were carefully studied and if, when necessary, our activities were intelligently directed punishment would seldom be necessary.

Our parents would realize that we are markedly curious, suggestible

and imitative. They would know how profoundly we are influenced by the general atmosphere of the home and how readily we copy the attitudes, manners and habits of older members of the family. We would expect, therefore, that they would practise such mental hygiene upon themselves as would make them worthy of emulation. Our questions would be answered in a simple, direct way, without deception, and with a frankness which would inspire confidence. We would gradually learn that those topics, interests and acts which are tabooed in public may receive adequate consideration in private. We would learn that such matters are of private interest because they are too unpleasant or too personal to be mentioned or discussed in public. At the same time care would be taken to avoid the feeling that our interest in these matters was unnatural or shameful. confidence in our parents would be such that we would spontaneously seek aid from them and we would be satisfied with simple explanations which were in keeping with our experience. In this way we would avoid feelings of guilt. We would not feel that there was something about us which caused us to be radically different from other children or perhaps inferior to them. Our parents would understand that in early childhood we are very curious about bodily functions and that we are likely to repeat any experience which gives us sensual pleasure, without realizing that habits thus established may lead to sexual perversions.

Our attention would not be called to sexual matters by adults. We have enough trouble with our own natural desires without having them emphasized by the carelessness of parents or by untimely sex instruction. Special care is necessary to avoid genital stimulation through too much or insufficient cleansing or through unwise fond-ling.

It would be observed by this time that some of us were inclined to show tendencies toward personality instability or what is commonly referred to as "nervousness," "nervous instability" or "neurotic character." While these tendencies may be due in part to inherited weaknesses they are more often the result of faulty mental and physical hygiene. Some of the more common indications of instability during these early years are a tendency to be easily startled or frightened, having nightmares, sleep walking, excessive thumb sucking, bed wetting, stammering, tics, choreiform movements, epileptiform seizures, vomiting, temper tantrums, marked aversions or

attractions for certain members of the family, or such traits as unusual timidity, stubbornness and cruelty, or the traits which characterize the "spoiled child." Such manifestations may be regarded as timely warnings of trouble later in life. Efforts should be made to improve the hygiene of the affected individual and also that of his environment.

The easiest and best time to modify and correct deviations from the normal development is at the time of their first appearance. Few routine procedures are generally applicable since each person becomes more and more an individual problem as he grows older. Hence it may be necessary to try a number of corrective procedures before success is obtained. In general, however, it may be said that many of the tendencies to instability may be overcome by proper mental hygiene. From the beginning the child should be trained to go to sleep in the dark without having someone remain in the room. As bedtime is approached, the amount of stimulation or excitement should be gradually reduced. No one should be permitted to frighten the child by ghost stories. The child should learn from the beginning that nothing is to be gained by temper tantrums. The family should continue to be unanimous in its attitude toward the child and the child should not participate in family quarrels. The child should not be exposed to the frequent complaints and manifestations of illnesses of older members of the family. It is just as harmful to be stressing the illnesses and weaknesses of the child. Nothing is gained thereby and the chances are very great of making him neurotic or handicapped with a feeling of inferiority. In order to avoid jealousy each child should be given an equivalent amount of attention, affection and opportunity for self expression, the details being adjusted in accordance with individual needs. The interests of the child should be gradually directed away from self curiosity and self pleasures, toward objective interest in the environment. This is facilitated by play and companionship with wholesome children.1

As we enter the period of youth we find that our lives have become much more complicated. We can no longer indulge ourselves in the familiar environment of the home but must begin our adaptation to larger social groups. The responsibility for our training becomes divided between the home and the school. We begin to learn so to

<sup>&</sup>lt;sup>1</sup> Barker, L. F.: How to avoid spoiling the child, Mental Hygiene, 3: 240. Richards, E. L.: What has mental hygiene to offer? Mental Hygiene, 11:1.

govern ourselves that a number of individuals are benefited by our activities. We become more truly social beings and begin to learn to play the game of life according to the rules and customs of those who are less partial in their decisions than members of the family have been. Again it should be emphasized that we should not participate in any differences among those who are directing our development. The parents should be intimately acquainted with the problems of the home. Our participation in any conflict not only results in loss of confidence in those whom we should naturally follow but it gives us opportunity to ally ourselves with either of the contending parties according to our whims or selfish interests. If the school teacher is criticized in our presence we are thereby encouraged in our misconduct or defiance. Instead of being educated to the viewpoint that existing law and order are based upon social experience and represent attempts to serve the interests of the majority, our negativistic and destructive impulses are being encouraged.

We are much less inclined to become social problems if we are trained to participate in physical activities as a group. We are less self conscious and have more time, enthusiasm, spontaneity and energy than we will ever have again. We should all participate in the ordinary activities such as running, jumping and climbing and we should be taught how to defend ourselves by wrestling and boxing. We should learn how to enjoy outdoor sports such as swimming, rowing, paddling, sailing, horseback riding, skating, coasting and skiing, and we should be given instruction in tennis, baseball, football, as well as in the games which in later years will serve as recreation or pastime. It is presumed of course that boys will be occupied with the more aggressive and vigorous activities. Emphasis should be placed upon individual development and the mastery of natural forces rather than upon the expression of hostile impulses toward others in competitive games.

If we do not learn to play during this period the chances are that we never will and we will also lack the physical poise and stamina upon which the growth of later years depends. We should be encouraged to develop a moderate amount of skill and experience in a large number of activities rather than expertness in a few. Although all our activities are influenced by the approval or disapproval of older people we should participate in these activities for our pleasure and on our own initiative.

In addition to the participation in these playful activities we should be gradually initiated into assuming certain responsibilities. We should receive training in some of the simple tasks associated with the maintenance of a home. In the beginning our assistance may have little or no value but the time, patience and material expended will ultimately be well repaid. We will be introduced to some of the serious aspects of life with which every adult must deal. If energy is thus expended we will have much less opportunity to develop unhygienic habits. Under such circumstances we should be well on our way to health and happiness.

During the period of youth a good deal of diversity in our development would be noticed. Many of us could be described as being unusually bright or dull, active or listless, bold or shy, irritable or placid, alert or preoccupied, mischievous or well behaved, vivacious or stolid, talkative or laconic. Some of us would be inclined to impose upon others and on the other hand some would not tolerate any imposition. Some would be especially difficult to manage while others would be regarded as being too good. A few would still show in an exaggerated form some of the early manifestations of personality instability already mentioned. Some of those who had been considered healthy would begin to manifest instability.

These instabilities are more commonly regarded as being due to some mysterious defect in development, or to some error in formal discipline. As a matter of fact they usually have their origin in personal relationships. The problem in each case is usually instinctive or emotional in nature. It is not understood by the youth and the parent or teacher may not even guess its source. A boy may react violently to disciplinary measures because the father's domineering attitude has caused him to be sensitive and antagonistic to authority. A girl may be unmanageable as far as her mother is concerned because she is her father's favorite and knows that through him she can have her own way. A child may be made irritable, quick tempered or timid and submissive by the teasing or abuse of an older brother or sister who may be jealous of the affection of the parents. A youth may be secretive, inattentive and unsociable because he has secret habits which cause him to be self conscious. Sometimes a child is so intolerant of being unable to compete with other children that teasing, lying, pilfering, setting fire to things or committing acts of cruelty may serve the purpose of attracting the

desired attention and gaining a kind of prestige which the weakling craves.

During this period many children have their first definite sexual experiences. Masturbation is the most common form of indulgence but more perverse practices may be taught by older persons. With repetition so early in life these practices tend to become the habitual mode of gratification and there can be no doubt that they are unhygienic. When sexual irregularities become known it is necessary to approach the youth with an attitude of understanding and a desire to help rather than to yield to the inclination to punish or to accentuate the sense of shame. Steps should be taken to avoid a repetition of the situation in which the indulgence occurred and also to improve the general hygiene. Some discretion must be exercised regarding the extent to which knowledge of sex functions is imparted but in any case the youth should not be permitted to feel disgraced for life. Such a feeling may remain dormant for years and may gradually undermine health and happiness. It may even become an important factor in causing a personality disorder.

Thus far we have enjoyed considerable freedom in mingling with other children regardless of sex. But as puberty and adolescence are approached we begin to feel embarrassed in the presence of the opposite sex. Our attitude toward all sexual matters begins to change. We should understand that this is due to the maturation of the sexual functions and that we shall soon be confronted with some of the responsibilities of adult life. Some may then have reached the most trying period in life particularly if there has been little instruction regarding the meaning of the new sensations and impulses. It is particularly desirable that confidential relationships with the parents should be maintained during this stormy period as their greater experience should help us in the solution of our problems. We would expect of course that the adults in whom we confide would have themselves attained a wholesome attitude toward sexual functions.

We should not be permitted to feel that the period of adolescence is difficult for us alone. Other members of the family and our more intimate friends must also make radical adjustments to the changed conditions. If our parents have been wise they have been gradually allowing us more freedom in self management and we have learned to be more responsible for ourselves and our conduct. While they are proud of the progress we have made toward sturdy manhood and womanhood they may look forward with sorrow to the time when our need for living independently necessitates the breaking of home ties. They may also be troubled by the rash ventures which lack of experience permits us to attempt.

For the majority of persons adolescence should be regarded as the period in which experience is gained for the selection of a suitable mate. Differences of opinion as to the way in which and the extent to which this experience should be obtained are inevitable. For a few years at least, it would seem better for boys and girls to be associated with each other in large groups so that there may be opportunity for each individual to become acquainted with a number of different types. Probably at no time are we in greater need of consultation with those who have had experience partly because we are driven by an impulse to assert ourselves and because we are not very receptive to guidance. However, if our parents are tactful and use their prerogative of final decision as the last resort, most of us can be guided to a maturity that is founded upon hygienic principles.

Some of us, either through inherited weaknesses or faulty hygiene, will not be able to survive the struggles of this period without some obvious difficulty. Those who have submitted to the domination of a parent may now vigorously resent any suggestion of authority and may make desperate attempts to become independent. On the other hand the effeminate type of boy who is sometimes referred to as being "tied to his mother's apron strings" may be prevented by the mother attachment from experiencing a real affection for any other member of the opposite sex. Likewise the masculine girl who continues to be her father's favorite may not be interested in boys largely because none seem to approach the ideal represented by her father.

Many who have not had trouble previously may now be disconcerted by the multitude of new sensations and desires. A conflict between moral ideals and demands for sex expression is inevitable. There may be insecurity on account of secret habits or forbidden affections which contribute to the seriousness of this conflict. It may seem so personal or strange that no solution can be found. It may distract attention from the actual environment to such an extent that behavior is determined more by the internal conflict than by normal interests and desires. Tendencies toward dissipation, day dreaming, brooding, unusual self consciousness, seclusiveness, evident depres-

sion or exhilaration, suspiciousness or irritability indicate failure to deal adequately with personal problems. When such is the case a psychiatrist should be consulted without delay.

Just as most older people at times are aware of a desire to be free of adult responsibilities and to return to the pleasures and freedom of childhood, so all of us, in the face of a difficult situation or personal struggle, have unconscious tendencies or wishes to seek shelter and solace in the pleasant associations of long ago. It is at such times that the internal personal struggle exceeds our resources for readjustment and that unconscious forces begin to operate noticeably. It is at such times that the "psychopathology of the normal" begins to manifest itself and that psychopathic tendencies may develop into some form of personality disorder. In other words the dominance of unconscious desires may cause us to attack non-essentials with excessive energy expenditure (manic psychoses), to approach a dormant condition in which we are overwhelmed by ordinary experiences (depressive psychoses), to attempt to shield ourselves from responsibility for our personal difficulties by blaming others (paranoid psychoses), to avoid contemplation of intolerable personal problems by focusing attention upon minor personal worries or physical symptoms (psychoneuroses) or to retreat permanently to a state where childhood and infantile memories and longings control our interests (schizophrenic psychoses). In short, these tendencies become manifest according to the way in which the particular individual has been inclined to solve his problems. The various personality disorders represent compromises between conscious and unconscious forces as well as easier modes of adaptation to life situations.

Let us suppose that we are now young adults and that we are still in good health. We are now able to maintain ourselves independently and to assume our share of the responsibility of a home. We should still welcome any assistance which our parents may be able to give in making the final selection of a suitable mate. Good hygiene requires that marriage be an expression of genuine love.<sup>2</sup> Long engagements require too much self denial and hasty marriages too often demonstrate that living with an entire personality is quite different from falling in love with a beautiful face or attractive manners.

Although marriage and children are generally regarded as essential for personality development it does not necessarily follow that

<sup>&</sup>lt;sup>2</sup> Meyer, A.: The right to marry, Mental Hygiene, 3:48.

marriage is a hygienic undertaking for all people. Decidedly effeminate men or masculine women seldom make a success of marriage except on a Platonic basis. Such persons are deficient physiologically and psychologically as far as mature sex functioning is concerned. A person who does not respond to the approach of eligible persons of the opposite sex or who maintains a flirting, teasing attitude may likewise be deficient, or retarded in emotional development through early libidinous fixations. Marriage cannot be regarded as a form of treatment. If a person is already poorly adjusted he is likely to have more difficulty after marriage. In other words, marriage seldom has therapeutic value for alcoholics, drug addicts, homosexual or narcissistic persons, or for those who have other forms of personality disorder.

Many are unable to find a suitable mate. Some have responsibilities which prevent marriage and a few must postpone marriage in order to obtain greater intellectual training. Whatever the course in life may be it is essential that all persons have a clear understanding of sexual energy. At no time should our sexual desires be considered unnatural or shameful. It is only the manner of gratifying these desires which may be shameful. We should be able to discuss our sexual problems with certain friends and relatives just as we discuss any other problem. We should all realize that our greatest accomplishments are in large part sublimations of sexual energy. Parenthood as a rule requires the sublimation and expenditure of the major portion of this energy on a small group. Without the immediate responsibilities of married life we may be able to continue individual development until we are able to render special service to a larger number of people. On the other hand, if we dissipate this energy we may deteriorate into selfish, sensual and eccentric persons.

As soon as we begin to assume the responsibilities of adults we are introduced to a great variety of social problems other than those of the home or the immediate family. These problems require serious consideration. Shall we be unduly influenced by wealth, fads, cults, personal pride, popular opinion or petty jealousies? Or shall we be governed in life by those motives and principles which are really important and enduring? We find that there are large groups of individuals who are dependent upon productive members of society for protection. We must contribute to the support of the aged, the pauper, the feeble-minded, the mentally sick, the criminal and the

immoral. We must study more and more the means of preventing mental illness and deficiency. We must concentrate on the criminal or the immoral person rather than upon his misdeeds. If we do not find more effective means of preventing or dealing with these abnormal conditions our present civilization must perish. We shall find as we try to solve these problems that one of the greatest sources of help is from the practical application of mental hygiene in the community.

Many other social problems will require our serious consideration. We must, however, pass to further consideration of some of our more personal problems. Some of us will be surprised and disappointed in finding that marriage has not only failed to solve our problems but has added complexity in the form of increased responsibilities and the curtailment of freedom. Previously, as adults, we were governed more or less by our own wishes. We must now consider the interests and wishes of someone else. More than this, we frequently find that the one who previously seemed ideal is also a human being with selfish interests which we must modify or to which we must adjust ourselves. Some of us, following the example set by parents, will try to dominate. Others, in compensation for a feeling of insecurity, will try to exert authority. Some of us will manifest a craving for affection or a tendency to be unfaithful by being jealous. Some will show immaturity by appealing to parents for aid in settling petty troubles. Some individuals will be so impressed or overwhelmed by the new responsibilities that they will never return to a well balanced way of living. Some will be so self conscious about actual financial limitations that their struggle to give others the impression of affluence makes life a burden. In fact the chances of disharmony are so great that we marvel at the courage and tenacity with which people continue to struggle toward their goal in life.

There are so many individual problems that it is only possible to make very general suggestions. It would seem wise that married people form the habit of discussing frankly with each other any question which is of personal interest. The best time to settle any disagreement is soon after the immediate unpleasant feelings have subsided and when each is able to think more clearly about the real issue. Uncertainty and hopes that all will be well eventually are very wasteful of energy. Each of us should, as far as possible, continue the same or similar interests, recreations, sports and social

relationships that were enjoyed before marriage. It is to be hoped that they may be shared. Sacrifice of such interests for the sake of remaining inseparable or proving one's undying devotion has sentimental value but it is also deadening to affection. It would be better to sacrifice mutual self indulgences by taking separate vacations occasionally. The change of scene and associations may add a freshness and zest to living which will contribute to the happiness of the home.

A certain amount of work and play is essential for the health and happiness of everyone. The pursuit of ambitions, ideals and success should never be so strenuous as to make life a drudgery. We must now and then take a little time to reflect upon the course we are pursuing. We may then wish to venture upon new pathways. We travel this way but once and time passes quickly. We may even choose to be guided by the old adage, "Gather ye rosebuds while ye may."

As we grow older, experience and specialization should make us more useful to society. At the same time gradual fixation of habits lessens our capacity for adaptation to change. This is especially true of those persons who get into a rut by limiting their interests and efforts to one special field of endeavor. It is also true of those who content themselves with the companionship of a few individuals. All adults should be active members of social organizations and all should have some definite hobby. Just as truly as it may be said that a person is "as old as his arteries," so it may be said that a person's age is indicated by his capacity to make new adaptations.

Some of us will have difficulty in accepting the inevitable compromise between our ambitions and ideals and what we are actually able to attain. There will be many ways in which we are wasteful in the expenditure of emotional energy. Each new experience may be greeted with excessive enthusiasm but there may follow a period of disappointment or discouragement over the actual progress made. We may exhaust ourselves trying to compensate for a personal feeling of insecurity. We may gradually isolate ourselves because we spurn the aid of friends through fear that acceptance would be an admission of personal weakness. We may yield to self indulgence because of self pity or for the sake of a kind of sociability. Much of this might be avoided by an occasional frank discussion of ourselves and our problems with those whom we can depend upon to give us an

honest opinion. We must remember that human behavior is supposed to be characterized by intelligent direction, that in the highly organized society in which we live, emotional energy should be reserved for emergencies and should always be subservient to our intelligence. But whatever our intellectual resources may be, we must realize that they are less important than our ability to "get along with people."

Middle age should find us at the height of our usefulness to society. This is due not only to a wealth of experience but also to the fact that we have become expert in some special field of endeavor. Most of us will be engaged in guiding the efforts of younger individuals. We should allow them to have more responsibility as they show themselves capable of assuming it. Eventually we may be thus relieved and they may be prepared to follow in our footsteps. Before this time we may have reached the limit of our capacity for responsibility. Good mental hygiene requires that we must always keep within this limit.

In other words, many of us will live most happily and efficiently engaged with modest tasks and with the assurance of a comfortable living as long as we faithfully and regularly attend to them. Through lack of foresight or the lure of transitory pleasures some will have dissipated energy and neglected opportunities for progress. Such individuals may have become increasingly dependent upon social gratuities. Whatever our course may have been we should not undertake radical changes in the manner of living. The inevitable fixation of habits too often has led to failure in an attempt to make new adaptations. A change in occupation or the moving to a new home from one hallowed by memories may be an important factor in precipitating a serious mental illness.

We shall all at this period experience some of the changes which warn us that our more active days are passing. Associated with the decline of the sex functions there may be emotional disturbances which require the attention of a psychiatrist. There will be times when the future appears dismal and reminiscences are tinged with feelings of remorse. At such times we must remind ourselves that the best antidote for unprofitable introspection is a genuine interest in the welfare of others.

As old age approaches we shall find that the capacity for adaptation to change grows less. We shall be more inclined to be governed by past experience and we should become less venturesome. Some of us will yield very reluctantly to increasing infirmities. Some will jealously cling to responsibilities which should be assumed by those younger. The uncertainty of the future and the gradual narrowing of the interests of the present will cause us to dwell to an increasing extent upon the memories of the past. Whatever the situation in life may be it is essential that we continue to be physically and mentally active to the extent to which the remaining vigor permits. Otherwise we more quickly become introspective, self absorbed and finally dependent.

We all realize that these changes are inevitable and we should prepare to meet them gracefully. A philosophical attitude or a faith in the hereafter may help us keep up our morale to the end. Death is almost always a much more trying ordeal for our friends and relatives and since we cannot turn back we should prepare ourselves to follow others with that attitude and faith which gives us the greatest comfort.

## CHAPTER XVI

## DISORDERS OF CHILDHOOD

In the consideration of disorders of childhood it seems desirable to call attention to the setting in which these disorders develop and to make some comment upon their prevention. Hereditary and constitutional factors appear to be immutable by the time that the child is presented but it is not unreasonable to expect that education of the general public regarding eugenics, birth control and prenatal care may favorably alter predisposition and contribute much to the inherent stability of a child. Until such education takes effect the child will continue to be the product of a series of irrational acts. There is practically no supervision of those who are to become parents, conception is frequently accidental, and the preparation of the mother for the care of her child is much neglected.

With this relatively fixed background the physician has been inclined to concentrate his efforts on the child's general hygiene and upon factors which come into operation after birth. His prenatal care is restricted to the physical health of the prospective mother. The physician is primarily interested in the functioning of her pelvic organs in order to obtain a successful delivery. The personal problems of the mother and her physiological and emotional fitness to be a mother seldom are of much concern to him.

This is especially true with the increased specialization in medical practice. Within a few weeks after the birth of the child the obstetrician yields his responsibility to the pediatrician who is too often an expert merely in the physical care of the child. This lack of continuity and the limited scope of early medical care greatly handicap the psychiatrist who may in later years be called upon to deal with maladjustment and may wish to reconstruct the child's early life.

Whatever the nature and sequence of events may have been in the development of behavior problems an understanding of them requires careful scrutiny of the habits of eating, elimination and rest. It is not enough to inquire whether and how long the child was breast fed.

What was the mother's attitude toward nursing her child? Did the child seem to be satisfied with the nourishment obtained and with the act of sucking itself? Was the child weaned too soon? Did the mother realize that the child often requires a substitute for the nipple? The desire for repetition of oral pleasures is so universal and persistent that few adults can resist the impulse to have a finger or other object in or near the mouth. Was the mother content to assist in the natural development of toilet training or was she guided by arbitrary standards in the establishment of habits of cleanliness? Did she follow the natural inclinations of the child in forming the habit of sleeping alone and in the dark or did she communicate her anxiety to the child by some form of attention every time he cried?

These questions are introduced here merely to suggest the scope and direction of psychiatric inquiry.<sup>3</sup> They are directly related to the problems of early childhood and indirectly to the maladjustments of later years. If a child's habits of eating, elimination and rest are normal he is less likely to have difficulty in personal adjustment. If he obtains undue pleasure and has learned to dominate the attention of others through distortions of these habits he has taken a step in the direction of personality disorder.<sup>4</sup>

Early in life the child is exposed to many sources of maladjustment. He is very likely to meet with difficulties in connection with his feeding. Instead of being guided by his appetite the mother or her substitute may serve each meal in standardized amount and variety and insist that he cat whatever is served. Often he is served too much and his appetite is further impaired by the attitude of those urging him to eat. Under these circumstances he can scarcely resist the temptation to play with his food, hide it or to regurgitate it after he has been forced to take more than he wants. Such reactions on his part are seldom understood by adults and lead to additional complications. Eating should always be a pleasurable activity and the necessary stimulus is hunger.

<sup>&</sup>lt;sup>1</sup> Childers, A. T. and Hamil, B. M.: Emotional problems in children as related to the duration of breast feeding in infancy, Amer. Jour. Orthopsychiat., 2: 134.

<sup>&</sup>lt;sup>2</sup> Olson, W. C.: Oral habits in children, Amer. Jour. Orthopsychiat., 1:311.

<sup>&</sup>lt;sup>3</sup> For a detailed outline of psychiatric investigation see the author's Essentials of Psychopathology, Chap. X.

<sup>&</sup>lt;sup>4</sup> Hill, J. M.: Infant feeding and personality disorders. A study of early feeding in its relation to emotional and digestive disorders, Psychiat. Quart., 11:356.

Before the age of three the child is usually too distractible and too awkward to attend to the mechanics of eating without assistance but constant supervision is necessary to see that this assistance is of the proper kind and amount. Servants and others are prone to cater to the whims of the child in continuing the use of the bottle, in spoon feeding, or in altering the content of the food by making it sweeter. Often they will introduce the child to compulsive behavior by adding some ritual to daily activities. By their coercive attitude they stimulate resentment and protests in the form of temper tantrums. They seldom resist the tendency to command by threats which are rarely carried into action and which the child soon learns to disregard.

By the time he is due to have some attention in regard to toilet training he has already learned certain ways in which he can take advantage of those caring for him. For some years the act of elimination, the parts of the body involved and the products of elimination are of absorbing interest to him. At first he cannot understand the reluctance of adults to join him in his pleasures and then he discovers through their embarrassment that they are vulnerable. Even though he soon achieves a formal politeness in adult society the sharing of bathroom activities with his companions may continue to be an hilarious affair. Too much haste and anxiety in getting him socialized will drive him to more subtle or more obvious ways of indulging himself and at the same time foster a sense of guilt. He may express his rebellion against coercion by developing constipation or through his proficiency in the use of obscene language. On the other hand he may express his submission and his sense of guilt by excessive neatness or a hypochondriacal interest in gastrointestinal functions.

With the comparatively recent discovery of the relationship of early oral activities and of the habits of elimination to personality development there has been a tendency to neglect other aspects of childhood adjustment. The great diversity of clinical problems suggests an equivalent diversity in their causes. Intensive study of the family background and of the personal history in each case demonstrates the multitude and the complexity of factors in childhood disorders.

The value which these factors have in personality adjustment is most evident when their influence can be followed through to the distortions of adult life. Their origin is often obscure but they are often heralded by the emotional conflicts of preceding generations.

Perhaps a few clinical illustrations of such distortions will serve to call attention to the individuality of causes, manifestations and consequences of childhood maladjustment. In the case of a middle aged man who had a craving to wear female clothing the genesis of the personality distortion may be traced to the generation of the grandparents. On both sides of the family each succeeding male became more and more emotionally dependent upon correspondingly dominant, motherly women. The patient describes his paternal grandmother as a domineering but "very sympathetic and understanding mother. Her voice has wonderful—one of those things you remember as the solace of beautiful music." The father, an artist and a "soft and gentle" person, was almost completely frustrated by his frigid, practical wife. "When he talked about the things of the spirit she just could not understand. She didn't fit into that subtle conversation of persons of high intellectual attainments but she always knew better than you did whether you needed to wear rubbers. What he needed was a surrogate for his mother, and if he had had it he would have been one of the great figures in art."

On the maternal side the grandfather had a "very forceful wife." He liked to be coddled by her. "That seems to be true of the men of the family. She mothered him as her child." The patient's mother was loved "too much" by her father and was married against his wishes through the arrangement of her mother. Nevertheless the patient's mother succeeded in managing her older brother and younger sister before she undertook the domination of her own household. "She managed and treated her sister as a little doll. She wanted to repeat that experience with her own children and she did."

Both of the patient's parents hoped in vain for a daughter, and the patient was treated as a substitute. He was "very beautiful" and spoiled as a child. "My mother lavished great attention on me. She wanted to make a companion of me, so I did little things around the house. I learned many of the household arts. I ironed the clothes, cooked, sewed and crocheted. Every night she told me the story of Goldie Locks and the Three Bears. I could see Goldie Locks as if I was there. My hair came down to my waist, they kept me in dresses and I had the impression I was a little girl. I always played with little girls.

"The first thing I recall is standing in the bay window kissing my father goodbye. I would watch until he got to the corner and then

he would throw a kiss and wave. I would jump up and down. I can still project this picture of a little girl with hair to her waist. That was the heaven of my life.

"The putting off of girl's clothing and the putting on of pants coincided with my having to go to school and was responsible for my unwillingness to learn. I resented bitterly putting on boy's clothing. I had to be taken into the bedroom and spanked before I would consent. The only ruse I could use to stay home from school was to defecate in my trousers. It seems I can recall the pleasurable feeling of this defecation.

"I was in the first grade two terms. I am absolutely sure that was resentment against the loss of the childhood paradise and the fact that I was thrown out with a beating. I was always troubled with constipation from the same cause. I was unwilling to cooperate. My father told me it would be a very bad thing for me, that I should go to stool every morning after breakfast. I listened and tried but of course when you don't want to have a movement you don't. In the development of resistance I remember when my father decided I should learn my ABC's. Father would say, 'This is A and this is B.' He was in a bad frame of mind. I would get it wrong and he would call my little brother and he would do it. I resented that bitterly—being made a fool before my little brother.

"It was only after maturity that I began to feel beauty in boys. I had wished to be a girl or to have what the girl has in heritage—grace, beauty and clothes. That has been my attitude all my life, rather than to be a boy who has sexual affairs and the burden of accomplishment."

With this general background and early training it is not surprising that the patient longed for a woman who would be a "sympathetic and understanding mother." His first wife was nearly ten years older and had had experience in amorous relationships while he was still virgin. He was frightened by her advances and shocked to learn that she wanted a child by him. After struggling several years to satisfy her a divorce was obtained. His second marriage was equally unsuccessful.

Failure of any kind provoked a longing for a return of his early childhood. "I need good contact with the other person. I looked to marriage for that but in both my marriages I have been bitterly disappointed. Things keep going wrong and I want this feeling—

heaven. I become desperate at times. Then anything would be attractive to me. I get pleasure out of a tight corset, or anything painful, a counter-irritant to what I am feeling. I started wearing a girdle after my first marriage. A year later when I had pneumonia they had to telegraph my parents to get a girdle with long stockings attached. I wore my first wife's clothing with her knowledge. I did this when I was alone and in a bad state of mind, resulting from unhappiness. I was seeking for serenity in her clothing."

The only period during which he felt emancipated was when he had left his first wife. For a few weeks he had a mistress who seemed to understand his needs. "My interest in clothing evaporated while I was with her. I talked to her about it. One time when we were playing together she was wearing a dress of fine material and I said, 'I would like to have a dress made like that.' She said she would make one for me. That was all that was necessary. She had accepted me. I had a rôle that I wished in some unconscious way. It was a relationship existing between us which was accomplished without the dress, so the dress was of no importance whatever."

This case of transvestitism or eonism has probably been related in sufficient detail to indicate the setting and the many factors involved in the development of a morbid desire to wear clothing belonging to the opposite sex. A quite different but equally instructive clinical history was obtained in the case of a middle aged woman who has had recurrent Graves' disease complicated by cyclothymic reactions.

In this second case the patient ceased to be the center of attraction when she was three years old. At that time a sister was born and the father began to drink to excess. "He was a first class drunkard. He drank himself to death. I was sixteen when he died. My mother wouldn't let me go to his funeral because she didn't want me to lose a day's pay."

Her mother was "a refined old maid" who didn't want to get married but consented after much urging by her father. "He thought a lot of my father because he was a good pinochle player." Life had already been difficult for the mother because as the oldest in the family she had had the responsibility of bringing up eight siblings after the grandmother had developed a chronic mental illness.

As a child the patient was happy-go-lucky and in a long futile struggle to gain security and affection she at least succeeded in maintaining a calm exterior. Her mother was always irritable and fault finding. "When I did anything wrong she would tell my father and he would beat the life out of me. I have little recollection of him except for the beatings he gave me. My mother used to say that she had no use for me and that she should have twisted my neck the day I was born."

Efforts on the part of the patient to change this emotional attitude of her mother were of no avail. "I went to school only six months. Mother was doing three or four washings a day and needed me. I used to stand on a soap box to do the ironing. I went to night school for a while but would almost fall asleep because I worked so hard during the day."

The mother's baleful influence did not lessen as the patient grew older. "The more I brought home to my mother the happier I was. I was the main support. She picked on me because I was the oldest. I was heart broken because she thought more of the other two although I was earning the most money."

The patient believes that her mother hated her because in appearance she closely resembled her father. "She thought there was no-body like her son. I would cry to myself but said nothing. I asked her once if I really was her child and she said, 'Yes, and how I hate you.' I said that if I had children I would never be partial but she said, 'Who would want to marry you anyway?'"

In spite of her mother's oppression the patient at the age of twenty became engaged to a young man. "I couldn't continue with him because my mother wouldn't give her consent. She said I would have hard luck if I didn't do as she wanted. I gave the ring back to him. You have only one love in your life and that was torn away from me."

Seven years later the patient rebelled to the extent of marrying a widower twenty years her senior. "He was kind to me and that was more than I got at home. I decided that if my mother would treat me all right for three days I would say no to him. She was awful those three days. I told her 'Now I'm going to marry a man I don't love.'

"I got no pleasure out of marriage. Even when I would be having relations I would be wishing for the other man. My husband never knew that I didn't love him."

Marriage gave her only temporary respite. She still felt obligated to look after her mother and within a few years took her into her home. "The worst trouble I had with my mother was when she was living with me. If she couldn't be the boss she wouldn't stay. No matter what I did it wouldn't suit her. She was constantly nagging me to do more."

Under these circumstances and after years of struggle to gain affection and security the patient developed Graves' disease.<sup>5</sup> The first attack followed a blow to her neck caused by walking into an iron bar in the dark. The blow was so severe that she gasped for breath for ten minutes and felt she was going to die. When she began to lose weight rapidly she was told that she had tuberculosis. Two months of rigorous treatment for this disease caused her to become desperately depressed. Then a correct diagnosis was made and thyroidectomy was performed. She was sent to live with a sisterin-law to recuperate but was constantly nagged and required to do most of the housework and shopping. Three months later when another thyroidectomy was performed she didn't care to live but she was surprised to find that she was apparently recovered. During the next two years she was mildly hypomanic.

She was still troubled with her earlier emotional conflicts, however, and continued to drive herself excessively especially after her husband became incapacitated. A third attack of Graves' disease then followed along with several months of depression, another thyroidectomy and a subsequent mild hypomanic state.

In this case of Graves' disease the patient drove herself to undertake tasks which kept her continually submerged. Most of her energy was expended in physical activity, to a degree of gross self punishment. She probably would have been better adjusted and might have avoided her illnesses if she had openly rebelled against her mother's domination and had found ways of satisfying her own desires.

Suggestions as to the management of a child are always hazardous unless the child's needs, its past experiences and environment are comprehended. Even then suggestions have to be tentative because of the rapidity with which changes in the life situation take place. Furthermore it appears that some children are destined to be maladjusted in spite of the best type of hygiene while a few children become outstanding adults apparently because their childhood was unhygienic.

<sup>5</sup> I have found this kind of a life pattern very common in a series of more than five hundred cases of hyperthyroidism which I have studied.

The occasional survival of an exceptional child in spite of unhygienic childhood experiences is illustrated by the case of a young man now engaged in the practice of medicine.

With a father who was a member of a college faculty and a mother who took courses on the scientific raising of a child it would seem that they should have been well qualified to be parents. The child's difficulties began in his first year. He was the first born and a most carefully watched child. On a "scientific diet" he suffered so severely from malnutrition that he developed ulcers on bony prominences. He now shows signs of infantile rickets. This condition was remedied when a grandmother took charge and gave him a more liberal diet.

His diet continued to be a problem because he didn't care to eat anything except potatoes. He says that until he was fifteen he rebelled against the regular diet and was beaten to make him eat. When thus forced to eat he reacted with nausea and vomiting.

Both his mother and his grandmother concentrated on his elimination. They frequently used soap cones and enemas and by the time the boy was five he took the initiative in inserting his fingers and pins as well as soap into his rectum. He continued the interest in his rectum until he was fourteen in that he gave himself an enema every time he took a bath.

He was never discovered in any of these practices but he believes his sister two years younger knew about them. She was his "partner in crime." Until he was twelve they slept in the same room and they availed themselves of opportunities for inspection of the anal region and for mutual masturbation. Although he was jealous of his sister and there was much open conflict between them they never betrayed each other in anything involving mutual guilt.

Other forms of misbehavior were dealt with severely. For his persistent nose-picking he was "threatened with all sorts of punishment." When he quarreled with his sister the father would spank both of them, usually when they were naked. He often struck them on the buttocks with a piece of hose. The boy derived a certain amount of satisfaction from this. "I can remember a fantasy of wanting my father to take my pants down and spank me and then discover something wrong which would require his attention and manipulation."

Throughout his childhood he was constantly reminded of his frailty. "I was not allowed to do anything which might conceivably tax my

strength." Other boys took delight in taunting him because of his small stature and his inability to defend himself. They smeared his well kept Buster Brown and Lord Fauntleroy suits at every opportunity. "I went through agony with those suits. Finally I couldn't stand it any more and I took them off and threw them down a sewer."

His embarrassment at school and at home was accentuated by stuttering. This first appeared at the age of six. He was then unable to say hello because he couldn't clearly recognize acquaintances on the street until they were a few feet away. Several years later it was discovered that he had a marked degree of myopia. In school he was under tension because he couldn't see and he often deliberately gave a wrong answer, much to the amusement of others, because he couldn't pronounce the words necessary in giving a correct answer.

Whenever the family had visitors he was elected to sleep with a maiden aunt. He had become informed regarding adult sex activities by the age of nine and he did not hesitate when she induced him to explore her breasts and buttocks. "She was thrilled by my rendition of dirty stories." Until after puberty he indulged in secret masturbation, accompanied by fantasies of exotic sexual relations with the opposite sex.

Erotic experiences with his own sex began at four in a crib with another boy. He recalls several occasions on which they engaged in mutual examination and manipulation of the genitals. Homosexual activities, accompanied by fantasies of coitus with women, were resumed at puberty. They were terminated permanently after an older boy forced him to engage in mutual masturbation.

Parental discipline increased as the boy grew older. At ten he was disillusioned and enraged when he discovered that his mother and other relatives who demanded the truth from him were really untruthful themselves. At this time he began to steal money from his penurious parents. He felt he had been neglected by them. He spent the money for candy and toys for his classmates in order to gain their favor. When his parents discovered this dishonesty the mother became hysterical and within a short time her hair turned gray. Extreme punitive methods were deemed necessary and in a highly excited mood the father branded the boy's buttocks with a hot iron.

Thereafter the boy neither loved nor respected his father and the punishment stimulated the boy to greater cleverness in concealing his activities. Within a short time he had organized a boys' club for telling obscene jokes, swearing and thieving. Their depredations upon local merchants were carried out with much success.

Scholastic achievements were sporadic and dependent upon the acuteness of his personal problems. Stuttering gradually was overcome, largely through his own efforts in studying the speech mechanism and through his growing ability to avoid words which he could not pronounce.

At fifteen he began to grow rapidly. Within a year he was no longer undersized and was sufficiently matured to defend himself. His antipathy for his parents increased and he grew more and more independent of them. Interest in girls developed from love at a distance, to an affair with a girl who was already involved with another boy, and finally, after much experimentation, to a satisfying relationship with a girl of his own.

With such a background this person necessarily has many unsolved problems but he has trained himself to consider them objectively and to take appropriate action when desirable. He is still on the defensive and inclined to react to excess to any suggestion of arbitrary restriction or unintelligent direction of his activities. He is now happily married and is engaged in medical practice as well as in the instruction of parents and college students in the principles and practice of mental hygiene.

These three cases illustrate ways in which a child's psychosexual experiences may complicate adjustment both in childhood and in adult life. Curiosity regarding the various aspects of sex and the pleasure derived from sexual stimulation of various parts of the body inevitably lead to experimentation and practices which are disapproved. An objective attitude is probably the most difficult for parents to maintain largely because they have not solved their own sexual problems. If the parents are objective they are more likely to be successful in maintaining the confidence of the child and to the extent of being able to discuss his sexual problems with him. They are guided by the child's questions and experiences in their attitude and method of dealing with these problems. Their explanatory answers or comments do not go beyond satisfying the child's immediate curiosity. Even though the child has performed acts which simulate adult sexual relations he is still too immature physiologically and otherwise to appreciate their adult meaning.

It seems wise to intentionally neglect a specific act already committed until all concerned are able to talk in a dispassionate manner. In the meantime, without the child's knowledge steps are taken to avoid circumstances and relationships which encourage repetition of sexual acts. It is most important to keep the child in an atmosphere in which play, study, work, regular periods of eating and appropriate rest occupy his time. Rapid growth and frequent change of circumstances bring new problems and leave the old ones unsolved. Well adjusted and responsible parents are able to render assistance in the solution of these problems by keeping themselves informed regarding the intimate personal life of the child and by taking such action as the circumstances and the child's reactions permit. They realize that an exaggerated interest in sex on the part of the child is due to their own influence and to that of his intimate associates. If in spite of their best efforts the child appears to be deviating to a pathological degree they should consult a physician who is familiar with the psychiatric aspects of childhood.6

Whatever the problems of the child are they are certain to be in large part a reflection of those of the adults who have the immediate care of him.<sup>7</sup> The complaints which are presented to the physician are almost always the symptoms of underlying difficulties in adjustment. Refusal of food, persistent vomiting or chronic constipation may require specific attention but unless the motivations and the setting of these symptoms are understood and dealt with the treatment remains purely symptomatic and the results are likely to be transient.

The first essential in dealing with such problems is a detailed, verbatim account of the child's complaints. The parents and others who have intimate contact with the child should be permitted to express themselves freely about him. The specific complaints offered may be misleading and may even be designed to conceal underlying difficulties. As soon as the child's confidence is obtained his version of his illness and his problems should be obtained in detail. The truth is more likely to be told if the child is alone with the physician and engaged in what appears to be a casual conversation. A variety

<sup>&</sup>lt;sup>6</sup> For further discussion of sex problems see Chapters XIV and XV.

<sup>&</sup>lt;sup>7</sup> For a detailed presentation of some of these problems see the chapter on "Maladjustments in Childhood" in the author's Essentials of Psychopathology.

of techniques may be employed in interviewing children but facility in their use is acquired only through special training and experience. Direct questions are almost always futile. Time and patience spent in these interviews bring the reward of direct clues to the understanding of the illness and obviate unnecessary and harmful tests and examinations.<sup>8</sup>

If the problem is manifested by thumb-sucking<sup>9</sup> the source of the difficulty is likely to be found in the early feeding experiences. This habit begins in infancy and seldom persists after the age of seven. In many of these cases the milk was inadequate but most often the time allowed for nursing was insufficient. The substitution of a finger or some other object for the nipple is in the beginning largely compensatory but if the child feels inadequate or unloved he persists in this habit or returns to it as a means of consolation.

The mother of one thumb-sucker had suffered from malnutrition due to persistent vomiting while carrying the child. Within a few months after the birth the mother's milk was insufficient and the child finally refused to nurse and he chose the bottle instead. Thumb-sucking was soon initiated and persisted for several years. The thumb was regularly used as a pacifier when falling asleep and whenever the child was unable to cope with a situation. Mechanical devices employed to discourage the habit were of little avail. This child was the second of three and had to bear the brunt of the first child's jealousy and the loss of attention when the third arrived. By paying special attention to the emotional needs of the thumb-sucker and substituting other interests, the thumb gradually ceased to make an appeal.

Nail-biting is a manifestation of tension shown by hyperactive, fidgety children. In the beginning the habit may be accidentally acquired through association with an older nail-biting person. Nail-biting is not observed before the age of three and is most common during the first few years after puberty. The underlying tension probably has many sources but as the person grows older the chief

<sup>&</sup>lt;sup>8</sup> Kanner, L.: The significance of the complaint factor in child psychiatry, Amer. Jour. Psychiat., 13:171.

<sup>&</sup>lt;sup>9</sup> Levy, D. M.: Fingersucking and accessory movements in early infancy, Amer. Jour. Psychiat., 7:881.

Levy, D. M.: Experiments on the sucking reflex and social behavior of dogs, Amer. Jour. Orthopsychiat., 4:203.

source of tension appears to be conflict over masturbation. In most cases the habit disappears with improvement in personal hygiene but there may be relapses in response to unusual emotional stress.

Tension is also frequently expressed in the form of stuttering. This disorder of speech first appears when the child is exposed to the environment of the school. It has been estimated that nearly ten per cent of nursery school children stutter for a brief period. The disorder is most evident when the person is fatigued or under emotional stress. In childhood the disorder is almost always a manifestation of insecurity, of anxiety in the presence of others and of an exaggerated desire to gain attention. It is then best treated by eliminating the chief sources of anxiety, giving the child opportunity for freedom in speech and activity and by lessening the demands for vocal expression. Speech exercises may concentrate attention on the disorder and their therapeutic value is largely symptomatic. If stuttering persists intensive psychotherapy may be required.

These distortions of oral functions have many variants and each case has its own peculiar aspects. Oral activities are the center of attention in early childhood and it is not surprising that they are most frequently disordered. Much less concern is shown over elimination although there may be considerable anxiety over constipation and annoyance because of enuresis.

Bowel movements should afford pleasure and satisfaction to the child. With sufficient exercise, a properly balanced diet and normal feeding habits there should be no trouble with constipation. Supervision is necessary during the early years but it should be matter-of-fact except for expressions of approval. A regular time should be selected for evacuation and one during which distraction and haste are reduced to a minimum. As soon as possible the child should be left alone to take care of his own needs.

Of all the disorders of childhood enuresis has attracted the greatest attention. In a small percentage of the cases local genital irritation or malformation has been found but otherwise enuresis appears to be a manifestation of poor hygiene, faulty training and emotional instability. It is probable that these factors contribute much to the high incidence of familial enuresis. A history of urinary incontinence

<sup>&</sup>lt;sup>10</sup> Blanton, S.: Speech disorders as a medical problem, N. Y. State Jour. Med., 33: 215.

in the family has been obtained in more than fifty per cent of the cases of enuresis.<sup>11</sup>

Although about ten per cent of children have achieved continence at the end of one year the average child requires three years to gain sphineter control. Enuresis may become a serious problem in itself and it may also be a factor in future maladjustment. Its significance depends in large part upon the attitude and the emotional relationship of those having the immediate care of the child.

In most of the cases of enuresis the usual treatment prescribed is sufficient. Any contributing physical condition should be remedied promptly. The diet should be simple and bland and no fluid should be taken after five o'clock. Frequent inspection should be made to determine the time at which wetting occurs and thereafter the child should be taken to the bathroom before this time arrives. Failure should be overlooked and success rewarded with words or other marks of approval. If these simple meaures do not bring the desired results the child may be intellectually retarded or involved in a personality problem which requires special psychiatric investigation.

Enuresis, thumb-sucking, nail-biting, speech disorders and temper tantrums are not uncommonly associated and they are generally believed to be indications of personality instability. This impression is gained from their frequent occurrence in the histories of maladjusted adults but these childhood difficulties are by no means certain indication of future maladjustment.<sup>12</sup> Studies of childhood problems have shown that over twenty per cent of a group of one hundred college freshmen were thumb-suckers,<sup>13</sup> that thirty per cent of a group of three thousand children were engaged in nail-biting between the ages of six and sixteen,<sup>14</sup> and that one per cent of the general population stutter.

Similar high percentages of other neurotic habits have been re-

- <sup>11</sup> Horton, K. M.: Enuresis in hospital practice, Arch. Dis. of Children, 4:105.
- <sup>12</sup> Michaels, J. J. and Goodman, S. E.: Incidence and intercorrelations of enuresis and other neuropathic traits in so-called normal children, Amer. Jour. Orthopsychiat., 4:79.
- <sup>13</sup> Stevens, G. C.: Autobiographical material concerning the childhood environments and the effects on the after-adjustments of 100 recidivists and 100 college freshmen, Amer. Jour. Orthopsychiat., 2: 279.
- <sup>14</sup> Wechsler, D.: The incidence and significance of fingernail biting in children, Psychoanalytic Rev., 18: 201.

corded in the past histories of apparently well adjusted adults and it is evident that they are not infallible signs of future maladjustment. It is evident also that as a person grows older the number of factors contributing to personality disorder increases and that as society makes more and more demands his latent deficiencies become manifest.

The addition of the school environment to the home environment often solves many problems through the socializing influence of other children but the widening of social contact may be the beginning of further difficulties. Competition with other children and the loss of the indulgences of the home may severely tax the resources of a poorly adjusted child. Several modes of escape are available. Among them are the further development of neurotic habits or the more obvious escape through truancy. 15 Children run away from school because they are unable to keep up with the schedule, to gain special attention and sometimes to express defiance. Only the more aggressive children are likely to be truants. When school life becomes distasteful they gladly yield to the lure of adventure. Disciplinary measures may be effective but they usually obscure the underlying causes of dissatisfaction. Occasionally truancy is an expression of a well developed neurosis<sup>16</sup> which requires psychiatric treatment.

If the child continues to rebel against social order and adopts lying, stealing and other short cuts to distinction and personal gain he then is called a juvenile delinquent. The factors in delinquency are manifold and complex<sup>17</sup> but there is always compensatory striving because of personal insecurity. As a rule society is occupied with discipline and with punishment of misdeeds with the result that the problems of the offender are neglected. This method of dealing with delinquents has not been highly successful.<sup>18</sup>

As long as a person can maintain an aggressive attitude and can gain satisfaction from conflict with his environment he is not likely

<sup>&</sup>lt;sup>15</sup> Kirkpatrick, M. E. and Lodge, T.: Some factors in truancy, Mental Hygiene, 19: 610.

<sup>&</sup>lt;sup>16</sup> Broadwin, I. T.: A contribution to the study of truancy, Amer. Jour. Orthopsychiat., 2:253.

<sup>&</sup>lt;sup>17</sup> Levy, J.: A mental hygiene study of juvenile delinquency, Amer. Jour. Psychiat., 12: 73.

<sup>&</sup>lt;sup>18</sup> Shimberg, M. E. and Israelite, J.: A study of recidivists and first offenders of average and defective intelligence, Amer. Jour. Orthopsychiat., 3: 175.

to be greatly troubled with neurotic or psychotic disorder. His inability to compromise with the demands of society places him in the class of psychopaths. If he lacks the personal security necessary to maintain this aggressive attitude his failure will be manifested in personality disorder.

Delinquency is only one of many patterns of adjustment. The clues which a child may follow are found in a study of the early environment and of the child's reactions to this environment. If neurotic traits are conspicuous in the family and the child responds with similar trends the neurotic tendencies are likely to survive and be expressed in times of unusual stress.<sup>19</sup> They may be expressed in the adult forms of psychoneurotic disorder<sup>20</sup> or they may be incorporated in a psychosis.

The majority of neurotic children survive and find ways of adjusting or of sublimating their neurotic tendencies to serve some useful purpose in adult life. With our present knowledge it is difficult to foretell what course the maladjusted child may follow but since he is predisposed to further difficulty he should be given assistance in the solution of his problems at as early a date as possible.

Not much progress has been made yet in following the course of poorly adjusted children or of those who later in life have developed personality disorders. Retrospective accounts<sup>21</sup> and psychoanalytic investigations are subject to many errors which should be corrected by direct observation. Apparently there are no groupings of personality traits which are reliable indices of future adjustment. The great majority of persons appear to survive isolated unhygienic experiences as well as the childhood habits which often appear to be factors in adult maladjustment. Direct and continuous study of the emotional relationships and experiences contributing to childhood traits and habits in individual cases will probably contribute much to our understanding of the problems of adult life.

<sup>&</sup>lt;sup>19</sup> Wile, I. S. et al.: The continuity of the neurotic process, Amer. Jour. Orthopsychiat., 4:49.

<sup>&</sup>lt;sup>20</sup> Hall, M. B.: Obsessive-compulsive states in childhood and their treatment, Arch. Dis. Childhood, 10: 49.

<sup>&</sup>lt;sup>21</sup> Kasanin, F. and Veo, L.: A study of the school adjustments of children who later became psychotic, Amer. Jour. Orthopsychiat., 2: 212.

Bowman, K. M.: A study of the pre-psychotic personality in certain psychoses, Amer. Jour. Orthopsychiat., 4:473.

Studies of psychoses occurring in children show that these disorders are rare before puberty. In one of these studies all those under the age of fifteen were regarded as children but even with the inclusion of post-puberty cases there were only 18 in 5000 consecutive hospital admissions.<sup>22</sup> In another study<sup>23</sup> there were only 65 psychotic patients under the age of sixteen in 6000 consecutive admissions to a psychopathic hospital.

As a rule the psychotic reactions of children are not as clearly defined as those of adults. Affective psychoses are so rare<sup>24</sup> in child-hood that they should attract special attention. Many cases are probably overlooked because the manic phase appears to be little more than a slight variation of normal conduct and the depressive reactions are transient. As the child approaches puberty he becomes less distractible and more likely to become involved in his personal problems. The emotional disturbance in connection with these problems not uncommonly leads to violent action. In some countries five per cent of the suicides are less than fifteen years of age.

Schizophrenic disorders in childhood are less rare than the affective reactions.<sup>25</sup> Although the symptoms of illness in schizophrenic children are so well defined that a diagnosis is easily made the symbolization is usually naïve and the delusional formations are relatively simple.

The onset of symptoms in both the affective and the schizophrenic psychoses is likely to be rather abrupt and the illness is often precipitated by situations causing unusual emotional stress. It appears however that most of the children with functional psychoses are constitutionally susceptible to psychotic reactions. This is especially true in those schizophrenic cases in which the illness begins in early

<sup>&</sup>lt;sup>22</sup> Strecker, E. A.: Psychoses and potential psychoses of childhood, N. Y. Med. Jour., 114: 209.

<sup>&</sup>lt;sup>23</sup> Kasanin, J. and Kaufman, M. R.: A study of the functional psychoses in childhood, Amer. Jour. Psychiat., 9: 307.

<sup>&</sup>lt;sup>24</sup> Kasanin, J.: The affective psychoses in children, Amer. Jour. Psychiat., 10:897.

<sup>&</sup>lt;sup>25</sup> Potter, H. W.: Schizophrenia in children, Amer. Jour. Psychiat., 12: 1253.

Lurie, L. A. et al.: Functional psychoses in children, Amer. Jour. Psychiat., 92: 1169.

Levin, M.: Auditory hallucinations in "non-psychotic" children, Amer. Jour. Psychiat., 11: 1119.

childhood. Strong constitutional factors are also suggested by the fact that the prognosis for psychotic children does not seem to be as good as in adult cases.

Acute toxic psychoses or delirious reactions are more common in childhood than at any other period in life. This is due to the immaturity of the nervous system, the readiness with which reality and fantasy are confused and the greater frequency of acute infectious diseases. The symptoms are dependent upon the underlying physical disease and are characterized by apprehension, restlessness, disorientation, and the disorders of sense perception found in the delirious reactions of adults. Some children are much more susceptible to delirium than others and they may show this reaction repeatedly and with only a moderate degree of toxemia. Fragmentary memory of the delirious experiences usually persists in adult life.

Children are especially prone to personality maladjustment in case there is obvious endocrine disorder.26 Too rapid growth and precocious maturity as a result of pituitary and gonadal dysfunction make it difficult for the child to associate with other children because he is conspicuous and because he is unable to compete with those of his own stature or physiological development. On the other hand with arrested development a child is unable to keep up with the interests and activities of other children of his own age. Obese children are always the objects of teasing and often develop conduct disorder as a manifestation of resentment and insecurity. Hyperthyroid children may present behavior problems because of excess energy, irritability and aggressiveness which is not understood until symptoms of Graves' disease are obvious. Constitutional factors seem to predominate in these early cases and treatment of the disease is not as effective as in the case of adults. Hypothyroid children are likely to be regarded as mentally retarded unless other and obvious signs of thyroid deficiency are present. Fortunately thyroid treatment is effective in mild cases of deficiency whose early development was normal. Early recognition and persistent treatment of cretins permit intellectual development to continue until in some cases a mental age of fourteen is reached.27

<sup>&</sup>lt;sup>26</sup> Lurie, L. A.: The relation of endocrinopathic states to conduct disorders of children, Amer. Jour. Psychiat., 9: 285.

Lurie, L. A.: Endocrinology and behavior disorders of children, Amer. Jour. Orthopsychiat., 5: 141.

<sup>&</sup>lt;sup>27</sup> Brown, A. W.: Hypothyroidism and cretinism in childhood, Amer. Jour. Orthopsychiat., 4: 413.

Maladjustment seems inevitable also with those children who present recurrent convulsive phenomena. Some of them periodically act queerly or appear dazed. They may cry out, walk in their sleep or frequently fall out of bed. In the morning the bed may be unusually disheveled and the bed linen damp from excessive perspiration or incontinence. A frothy stain with a fleck of blood on the pillow case may suggest the nature of the disorder but it may not be recognized as nocturnal epilepsy until petit mal attacks or gross convulsive seizures are observed.

A child whose sleep is disturbed merely by dreams or nightmares can be rather easily aroused and is alert to his surroundings when awakened. Following an attack the epileptic child is likely to be slow in getting up in the morning. He feels heavy and stupid, he may exhibit pallor and his general reactions are in marked contrast to his alertness and spontaneity of other days.<sup>28</sup>

Injury or disease of the nervous system, and particularly of the brain, is certain to be registered in some way. Birth trauma may be followed by mental deficiency and a great variety of behavior disorders, some of which are not evident until several years after birth. Except for mental deficiency there is no specific type of residual but the subsequent behavior disorders are likely to be characterized by distractibility and hyperactivity.

Cerebral trauma associated with head injury in childhood may be followed by gross changes in personality.<sup>30</sup> Probably in the majority of cases of head injury these changes do not occur or they are not sufficient to attract attention. There seems to be no way of predicting in a given case what the developments may be. The sequelae are not in proportion to the severity of the head injury and after apparent recovery from the immediate effects of the injury there may

<sup>&</sup>lt;sup>28</sup> Branham, V. C.: Epileptoid reactions in children, Amer. Jour. Psychiat., 5: 423.

<sup>&</sup>lt;sup>29</sup> Schroeder, P. L.: Behavior difficulties in children associated with the results of birth trauma, J. A. M. A., 92:100.

<sup>&</sup>lt;sup>30</sup> Strecker, E. A. and Ebaugh, F. G.: Neuropsychiatric sequelae of cerebral trauma in children, Arch. Neurol. and Psychiat., 12: 443.

Kasanin, J.: Personality changes in children following cerebral trauma, Jour. Nerv. and Ment. Dis., 69: 385.

Blau, A.: Mental changes following head trauma in children, Arch. Neurol. and Psychiat., 35: 723.

be an interval of several months or years before post-traumatic symptoms appear.

In the milder cases of post-traumatic constitution the child is emotionally unstable, egocentric and subject to temper tantrums. In more severe cases the child may be chronically irritable, quarrelsome, subject to convulsive seizures or to explosive outbursts of violent temper, cruelty and destructiveness. He steals, lies and is generally incorrigible.

Similar personality changes are observed following encephalitis. The nature of these changes is dependent upon the child's original personality characteristics and upon the age of the child at the time of the onset of the disease. If the disease begins before the age of seven the outstanding sequelae are likely to be intellectual deficiencies. If the onset occurs later in childhood and before puberty the changes are manifested in conduct disorders. Psychotic changes may be expected when the disease begins after puberty.

Children presenting post-encephalitic conduct disorders may be unmanageable in the home or in school but they can be treated with considerable success in hospitals where they are segregated for special nursing care and for instruction.<sup>31</sup> If psychotic reactions develop in such cases hospital treatment may be obligatory. These reactions often resemble the manic-depressive types with admixtures of organic and psychoneurotic symptoms. Some of the depressed and agitated patients are impulsively suicidal, especially at night, when they are unable to sleep.<sup>32</sup>

The similarity in symptoms in the post-traumatic and post-encephalitic cases is probably due to similar wide-spread lesions. With cerebral trauma there is always some edema of the brain following the injury. This means a varying amount of increased intracranial pressure with constriction of blood vessels and interference with circulation in the brain. The result is death in the most severe cases but in other cases there may be microscopic, diffuse and multiple lesions which approximate the results of the wide-spread infection in the encephalitic cases. As a rule the prognosis is better in

<sup>&</sup>lt;sup>31</sup> Bond, E. D. and Partridge, G. E.: Post-encephalitic behavior disorders in boys and their management in a hospital, Amer. Jour. Psychiat., 6:25.

<sup>&</sup>lt;sup>32</sup> Rhein, J. H. W. and Ebaugh, F. A.: Affective disorders following acute epidemic encephalitis in children, Amer. Jour. Psychiat., 3:791.

post-traumatic cases because brain injury is not progressive as it often is in the post-encephalitic cases.<sup>33</sup>

The treatment of disorders in childhood is rapidly becoming a specialty in itself. The child psychiatrist is being called upon to deal directly with conduct disorders and to assist the pediatrician and the general practitioner when behavior problems complicate the usual medical treatment. At the same time medical students, parents and teachers are being educated regarding the problems of childhood so that there may be early recognition and appropriate action when these problems arise. Child psychiatrists are now in private practice in the large cities and they assist in the study and treatment of children in pediatric hospitals. The majority of cases are referred to child guidance clinics or to the out-patient departments of psychiatric hospitals.<sup>34</sup>

<sup>33</sup> For a description of juvenile paresis and other psychopathologic conditions in childhood see pp. 189, 20.

<sup>34</sup> Proceedings of the Third Conference on Psychiatric Education, The National Committee for Mental Hygiene, New York, 1936.

Lowrey, L. G. and Smith, G.: The Institute for Child Guidance, New York, 1933.

Allen, F. H.: Therapeutic work with children, Amer. Jour. Orthopsychiat., 4: 193.

Symmes, E. F.: Some techniques in securing rapport with pre-school children, Amer. Jour. Orthopsychiat., 3: 181.

Ebaugh, F. G.: Psychiatry in the care of children, The National Committee for Mental Hygiene, New York, 1935.

### CHAPTER XVII

## PSYCHIATRIC SOCIAL SERVICE

Although remarkable progress has been made in the past few decades in the practice of psychiatry, and more recently in its broader applications in the field of mental hygiene, there remain certain definite needs which are vital to further progress. One of the more urgent of these is the realization on the part of the general public of the serious social problem which personality disorders present. This may be facilitated by calling attention to some results of a recent statistical investigation.

In 1929 there were nearly 400,000 patients in the mental hospitals or about 70,000 more than the total number of patients in all other hospitals of the United States. During this year there were over 100,000 new admissions and at this rate it is estimated that over one million of the students now in schools or colleges will eventually be admitted to these hospitals. The annual cost of maintenance of patients in mental hospitals at the present time is over \$100,000,000 or in some states one-eighth of the total expenditures are required for this purpose. To this enormous burden must be added the care of 500,000 feeble-minded and approximately the same number of individuals who are annually committed to penal institutions.<sup>1</sup>

If these facts were generally known the average citizen would be more seriously interested in the nature and purpose of these hospitals. He would realize that their activities should not be confined to the study and treatment of the mentally ill but that they should also be mental hygiene centers for the prevention of personality disorders. Furthermore he would be interested in securing adequate provision for research studies of the nature, causes, treatment and prevention of these disorders. The burden of educating the general public to this realization rests upon all agencies interested in social welfare.

Among the agencies more directly concerned with this problem are those engaged in psychiatric social work or in the application of the

<sup>&</sup>lt;sup>1</sup> Mental Hygiene Bulletin, 8:7.

Twenty Years of Mental Hygiene, 1909-1929, pp. 23-28.

principles of social psychiatry and mental hygiene in the community. They are more specifically occupied with problems of personal and social adjustment of patients in pre-school and mental hygiene and court clinics as well as with the problems of patients who are in mental hospitals or are on parole or who have been discharged. They are also occupied with the problems of students in schools and colleges and they are extending their activities to business organizations and to various other fields in which the personal aspects of human relationships may require some adjustment. They are the most effective means of contact between the psychiatrist and the general public.

The development of psychiatric social service is one of the most recent and important advances made in the application of psychiatric knowledge. Organized social work for mental patients had its origin in London about 1880 when a "Society for the After Care of Poor Persons Discharged Recovered from Insane Asylums" began to assist the discharged patients who were without resources, homes or friends. Assistance was given until these discharged patients were able to maintain themselves in the community. Board and lodging were provided and they were helped in obtaining employment.

It was not until 1906 that a similar service was rendered in the United States. With the aid of the New York State Charities Aid Association a social worker was employed to assist patients who were paroled or discharged from two of the state hospitals in the region of New York City.<sup>2</sup> Social work was first introduced into state hospitals in 1911. At first the attention was confined to the welfare of patients who had left these hospitals. Those engaged in this service were known as "after care workers."

Actual psychiatric social work was first begun some years later at the Boston Psychopathic Hospital and through the suggestion of Dr. Southard and Miss Jarrett a formal training course in this work was started at Smith College in 1918.<sup>3</sup> Following the stimulus given by the need for this service during the World War and in response to the subsequent great demand for workers this field of endeavor has grown very rapidly.<sup>4</sup>

<sup>3</sup> Neilson, W. A.: The Smith College experiment in training for psychiatric social work, Mental Hygiene, 3:59.

<sup>&</sup>lt;sup>2</sup> Cheney, C. O.: The psychiatric clinic and psychiatric social work in a general hospital, Modern Hospital, 25:131.

<sup>&</sup>lt;sup>4</sup> Lyday, J. F. and Solomon, M. H.: The problem of the supply of psychiatric social workers for state hospitals, Amer. J. Psychiat., 7:629.

For a long time an urgent need had been felt for the contact between the psychiatrist and the general public which is now afforded by the psychiatric social worker. It is now possible to have in every community or large organization a person whose training permits prompt recognition of personality disorders and whose duty it is to give suitable information concerning the early manifestations of these disorders, and to see that curative and preventive treatment is received. In case the affected person requires the attention of a psychiatrist, either privately or in a clinic, hospital or other organization, the social worker may greatly facilitate consultations and treatment. When hospital treatment is required much can be done for the patient and family in the way of correcting misconceptions in regard to mental hospitals. Assurance may be given that the treatment received will be agreeable and effective, and the worker may be of great assistance in making arrangements for admission to the hospital. Specially trained workers may aid in obtaining the necessary information concerning the family and the general environment of the patient. Those who specialize in hospital work may facilitate the understanding and treatment of patients by taking the preliminary routine psychiatric histories. During the hospital treatment the general morale of the patient and the relatives is increased by the realization that someone not directly connected with the hospital is interested in their welfare. More important still are the services which may be rendered after the patient has been restored to health and is ready to resume life outside of the hospital. By this time the patient's special needs will have been ascertained and certain definite recommendations will be made by the attending psychiatrist. patients may require an interval of rest or a period of treatment at a different kind of hospital. Some may require adjustments in the home life, and some will need help in finding employment. Some may require close supervision and help from mental hygiene and other social welfare organizations for an indefinite period.<sup>5</sup> All of these services and many others may be rendered by psychiatric social workers.

In order to clarify the duties of the psychiatric social worker a committee of psychiatrists and social workers, meeting under the auspices of the National Committee of Mental Hygiene, defined the

<sup>&</sup>lt;sup>5</sup> Crockett, H. M.: Boarding homes as a tool in social case-work with mental patients, Mental Hygiene, 18: 189.

functions as follows: "(1) To facilitate admission to hospital or clinic and continuance of treatment; (2) to bring to the physician personal and social data helpful in arriving at a diagnosis and in outlining treatment; (3) to assist in carrying out treatment; (4) to interpret hospital and clinic to patient, family and organizations of the community; (5) to make social investigations contributing to medicosocial research."

Some attempts have also been made to determine what the personality qualifications of the psychiatric social worker should be. It has been suggested that she must be intelligent, alert, sympathetic, well poised and adaptable. Whatever her personal traits may be it is necessary that she be able to deal with all sorts of persons in a manner which wins confidence and coöperation. It is most essential that she be a mature individual and not handicapped by her own instinctive and emotional conflicts which would of course interfere with her ability to deal with similar problems in other people. She should possess self confidence, resourcefulness, initiative, leadership, tact and a genuine kindly interest in the welfare of others.

There are now several schools which offer comprehensive training courses for psychiatric social workers. A college degree is usually required for admission to these schools and undergraduate courses in biology, physiology, economics and political science have been found to be most helpful.

In these schools courses are given in the essentials of human behavior, the principles of mental and physical health, the application of psychology to social problems, psychopathology, social and clinical psychiatry, the mental hygiene problems of children, and in social case work. In addition to the theoretical study in connection with these courses, from one-fourth to two-thirds of the student's time is spent with field work or in the actual practice of psychiatric social work.<sup>6</sup>

As in all professional work much is dependent upon experience. This will of course vary with the kind of work as well as with the ability to learn by experience. Helpful suggestions have been made by those who have been engaged in this work for some time. A brief review of some of them seems desirable.

<sup>&</sup>lt;sup>6</sup> Vocational aspects of psychiatric social work, Mental Hygiene, 9: 561. Lee, P. R. and Kenworthy, M. E.: Mental Hygiene and Social Work, N. Y., 1929.

It is always necessary to use discretion and tact in making professional calls. When the interview is held in the home there may be interruptions by children and neighbors, there may be embarrassment because of the appearance of the home. It may be very inconvenient to interrupt the daily routine of the home in order to discuss the personal affairs of the family. The worker may fail to make good contact unless such matters are given careful consideration.

A successful interview is often dependent upon the relative age and experience, the religion and language, and the social, marital and economic positions of the persons involved. The social worker must learn to adapt herself quickly to the actual situation so that the person interviewed does not feel embarrassed or reluctant to disclose the truth.

The visit of the social worker is often felt as a kind of intrusion of the home and unless the worker shows by her attitude and manner that her purpose is one of friendly assistance it is certain that there will be resistance and misunderstanding.

It is usually more effective to begin the interview with somewhat neutral topics so that the worker may have opportunity to get oriented to the actual situation and to attain some degree of rapport before the more personal matters are approached. As far as possible the information obtained should be held confidential. Whenever possible it is wiser to take the position of an interested listener. Therapeutic suggestions are likely to be futile unless there is a friendly understanding. It is rare that any situation involving intimate human relationships does not require serious and careful study. Impromptu solutions are likely to expose the worker's inexperience and lack of understanding.

Such an error is perhaps more common with the social worker who has been partially analyzed and who then labors under the influence of a positive transference to both her analyst and the method he employs. The world then seems to take on a different hue and the more complex situations in life are likely to be comprehended in terms of a few simple formulations. Moreover such a worker is prone to make injudicious applications of psychoanalytic technique with the result that the problem of dealing with the patient becomes more complicated. A knowledge of psychoanalytic prin-

<sup>&</sup>lt;sup>7</sup> Rannells, M. E.: The psychiatric social worker's technique in meeting resistance, Mental Hygiene, 11:78.

ciples may contribute to a better understanding and greater precision in social work but it should not interfere with the performance of her regular duties. She should be occupied with the task of procuring for the psychiatrist the necessary social data regarding the patient and under the direction of the psychiatrist she should be engaged in adjusting the social problems of the patient. In other words her task is the adjustment of external social problems while the psychiatrist attends to the adjustment of the personality conflicts of the patient.<sup>8</sup>

In actual practice the social worker must possess the courage to make inquiries regarding the intimate affairs of other people, a kind of courage which is founded upon a genuine desire to be of service to others and upon a firm belief in the need of mental hygiene education. It should be her goal to assist others in making life adjustments, leaving them to make their own decisions as much as possible. She will therefore not impose her own views or prejudices upon others but will guide them as they are inclined to proceed on their own initiative.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Myrick, H. L.: Psychiatric social work, its nurture and nature, Mental Hygiene, 13: 505.

<sup>&</sup>lt;sup>9</sup> McNutt, L.: Psychiatric social work in the junior college, Mental Hygiene, 13: 271.

Rademacher, G. C.: The psychiatric social worker and the nursery school, Mental Hygiene, 13: 298.

Clark, H. I.: Personality and the social worker, Mental Hygiene, 13:99.

## CHAPTER XVIII

# MEDICO-LEGAL ASPECTS

It is generally known that the laws are always antiquated on account of their origin and the cumbersome method by which they are modified in the attempt to meet the needs of any given period. In order to understand fully the legal complications which may arise in dealing with the mentally sick it is necessary to review briefly the attitude of the law towards this problem.

According to the laws of ancient Greece a guardian might be appointed to care for the property of a mentally sick person and the Laws of the Twelve Tables of the Romans made provision also for the guardianship of the incompetent person. The revision of the Roman laws under Justinian specified that children who failed to take care of an incompetent father were subject to disinheritance and punishment and that a court could not pronounce judgment against an incompetent person.

Very early in the history of jurisprudence is noted the tendency to deal with abstractions and precedents. Although posing at times as a guardian of the mentally sick more often the law tends to stigmatize them. Improvements in its content and its administration seldom occur except in response to popular protest against injustice and inhumane treatment.

During the middle ages the mentally sick were accused of being in league with the devil. The law prescribed torture until the desired confession was obtained and then the punishment of whipping, cruel confinement, slow starvation or death by fire.

For ten centuries following the fall of the Roman Empire there is little evidence that the laws intended to safeguard the interests of the mentally sick continued to be effective. Moreover, most of them were either lost or so completely forgotten that they have had no influence in the legislation of modern times. Suitable and necessary laws were so late in appearing that the renaissance for the mentally ill did not begin until a little more than a century ago.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For details see a history of psychiatry by Zilboorg, G. and Henry, G. W. being published in New York.

Before the dawn of the new era for incompetent persons even inanimate objects were often found guilty of injuring a human being. They were then ceremoniously destroyed in the name of the law. Moreover, animals and children were tortured and killed. To rescue an insane person who had committed a crime from traditional methods of punishment was exceedingly difficult. The mob had been accustomed to give vent to its hate and its lust for revenge. The people were not at all inclined to accept a plea of insanity and demanded some positive test.

Many years passed before the courts accepted what was known as the "wild beast test." According to this a person in order to qualify as a madman must be totally deprived of understanding and memory and as incapable as a wild beast of comprehending the nature of his acts. This test was in vogue as late as 1723. It was not until 1800 that a defendant could be held irresponsible on the grounds of being a victim of fixed insane delusions. Thereafter insanity was determined by the "knowledge test" or the ability to distinguish between right and wrong.

All enlightened persons understand that the commission of an anti-social act by an alleged insane person has very little to do with the knowledge of right and wrong. Instead it is an expression of uncontrollable morbid feelings and impulses or it may be associated with a deterioration of those finer feelings which prevent normal persons from yielding to similar impulses.

The last legal step forward was taken in 1843 when it was declared that in order to establish a defense on the ground of insanity, it must be clearly proved that at the time the act was committed the accused was laboring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing wrong. Since that time psychologists, psychiatrists and criminologists have developed scientific methods of studying and dealing with mentally disordered or psychopathic offenders but the law has remained unchanged.<sup>2</sup>

As a result of this rigidity of the law, and the apathy of the general

Acad. Med., 5: 608.

<sup>&</sup>lt;sup>2</sup> Cushman, C. R.: Do alienists disagree? Mental Hygiene, 13:449. Glueck, S.: Principles of a rational penal code, Mental Hygiene, 13:1. Kennedy, F.: The rôle of the medical expert in criminal trials, Bull. N. Y.

public which it implies, the offender continues to be punished in accordance with the gravity of the offense. Any defendant who can pay the costs may obtain the service of experts who will testify, if it is at all possible, that he was not mentally competent at the time the act was committed. In all such cases the people must employ other experts who usually give contrary testimony. Each witness swears to tell the whole truth and nothing but the truth. As a matter of fact he merely answers the lawyers' questions which are so framed that it is not possible to tell the whole truth. The judge or the jury undertake to decide the degree of mental competency of the defendant even though physicians may require a period of several weeks' observation before arriving at such a conclusion. Until the general public becomes sufficiently aroused to demand a change this farce will continue just as it has for more than a century.

It is improbable that the legal and medical professions will ever fully agree upon methods of determining the mental competency of defendants especially as this question takes the case outside the scope of the legal profession. Moreover the legal profession is prone to center its interest upon the offense while the medical profession is interested in the kind of person who commits the offense. When the legal machinery operates without interference the prisoner is sentenced when found guilty, receives a specified punishment and is then free to commit a more serious offense if he is so inclined. The psychiatrist wishes to know what motives led the defendant to commit an offense and prefers to deal with the individual according to the extent to which he may be permanently unfit to continue with his usual social relationships. Such a question can be determined only after a period of intensive study by medical experts.

It seems obvious therefore that the court should be advised by a psychiatrist in any case in which the offense committed might be due largely to a disordered personality. He would either examine the defendant personally and submit a report or he would suggest that the defendant be placed under observation in a psychopathic hospital. The judge would then have the benefit of an impartial expert opinion before he rendered his final decision or before sentence was imposed.

A progressive step was taken by the State of Massachusetts in 1921 when a law was passed providing for the psychiatric examination

of all persons accused of a capital crime or who have been more than once indicted for a felony.3

Evidence of enlightenment is seen in the growing number of courts which make use of some form of psychiatric consultation.<sup>4</sup> This is especially true of juvenile courts which refer problem children to psychiatric clinics. In these clinics the problems of the child are studied so that some more intelligent steps may be taken to prevent a repetition of the offense.<sup>5</sup>

Illustrative of another kind of service which the psychiatrist may render is the study of traffic offenders. The findings in one hundred cases show that 42 of these offenders had subnormal intelligence, 12 were definitely feeble-minded, 46 were seriously handicapped by alcoholism and one was psychotic.<sup>6</sup>

In the highly systematized organization dealing with the administration of justice, beginning with the police and ending with the parole officials, little attention has been paid to the personal problems of the criminal. In recent years the psychiatrist has made this a subject of investigation. He has wished to know more of the individual characteristics and tendencies of the five hundred thousand persons who each year leave penal institutions to resume life in the community.

It is to be hoped that these persons during their period of segregation might in some manner be influenced so that on their return to freedom they might be better citizens. A psychiatric study of more than six hundred consecutive admissions to Sing Sing Prison shows clearly the inadequacy of present methods of dealing with these persons. It was found that two-thirds of these prisoners had already served one or more terms in prisons or reformatories. This high percentage of recidivism is better understood when we learn that 28 per cent of the whole group were intellectually defective, 19 per cent were psychopathic and 12 per cent were mentally disordered or

<sup>&</sup>lt;sup>3</sup> Overholser, W.: Psychiatry and the treatment of offenders, Mental Hygiene, 11: 306.

Glueck, S.: Psychiatric examination of persons accused of crime, Mental Hygiene, 11: 287.

<sup>&</sup>lt;sup>4</sup> Nelson, W.: Psychiatry and its relationship to the administration of the criminal law, Amer. Jour. Psychiat., 12:703.

<sup>&</sup>lt;sup>5</sup> Plant, J. S.: The relationship of the psychiatric clinic to the juvenile court, Mental Hygiene, 13:708.

<sup>&</sup>lt;sup>6</sup> Raphael, T., et al.: One hundred traffic offenders, Mental Hygiene, 13: 809.

deteriorated. Furthermore 80 per cent of the intellectually defective and 87 per cent of the psychopathic were recidivists and 70 per cent of the mentally abnormal were guilty of sexual offense.<sup>7</sup>

It seems obvious that making the punishment fit the crime does little more than perpetuate the enormous burden which these offenders place upon society. Unless a more rational disposition is made of these persons on the basis of psychiatric investigation prior to the imposition of sentence it is imperative that prisoners should not be discharged or released on parole until psychiatric examination has determined the chances of successful rehabilitation. Those who are found to be incurably incompetent or anti-social should be permanently segregated regardless of the particular offense committed.<sup>8</sup>

### MEDICAL TESTIMONY

Practically every physician at some time is called upon to give testimony in court. Without a good deal of experience he is likely to feel insecure and to be on the defensive. His lack of experience may cause him to make serious errors.

Theoretically a trial in court is held for the purpose of ascertaining the facts and to obtain, after due consideration of these facts, a judgment in the manner prescribed by the law. The lawyers are supposed to be assisting the court in ascertaining these facts and in calling attention to the pertinent decisions made in similar cases. Actually each lawyer is primarily interested in winning a favorable decision for his client. His whole procedure therefore is calculated to give the court a biased view of the case. The judge is autocratic and is inclined to give the impression that he is omniscient. It is not surprising therefore that he requires as much respect as a general in an army and that he is regularly referred to as "the court."

In order to feel at ease in such an atmosphere and to keep in touch with legal procedure a physician should now and then attend a court trial. It is especially desirable at the trial in which he is to participate that he be present for some time before he is to testify so that

<sup>&</sup>lt;sup>7</sup> Glueck, B.: A study of 608 admissions to Sing Sing Prison, Mental Hygiene, 2:85.

<sup>&</sup>lt;sup>8</sup> Glueck, B. and Michael, J.: Psychiatry and the criminal law, Jour. Nerv. and Ment. Dis., 81: 192.

Adler, H.: Psychiatry as applied to criminology in the United States, Jour. Criminal Law and Criminology, 24:50.

he may become somewhat acquainted with the lawyers, the judge and with the others who are involved. Such an acquaintance is desirable so that the physician may be shrewd and tactful in his responses.

It is necessary that the physician have a clear understanding as to what function he is to serve at the trial. If he is to give evidence merely as to the facts he occupies the same position as any other witness. This means that he confines himself to a presentation of the facts and carefully avoids giving his interpretation. In order to be permitted to give an opinion the physician must qualify as an expert. He must satisfy the court that he has sufficient experience and professional standing to be able to testify as an expert. If he is to testify as an expert this should be clearly understood beforehand because as an expert he is entitled to submit a bill for his testimony.

Before a physician agrees to testify as an expert he should be familiar with the facts in the case and be willing to support the claims made by the party employing him. If he agrees to testify he should study the hypothetical question also and have a conference with the lawyer about it before it is submitted to him on the witness stand.

While on the witness stand the physician should be sincere and dignified and maintain his composure no matter what the lawyers say or do. Regardless of how accurate the testimony may be its value may be lost through the physician's evasion or uncertainty. The preferred answer is yes or no. It is always better to be simple and direct in answering questions and to avoid making any additional statements. The opposing lawyer usually tries to be disconcerting and will use every opportunity to discredit the physician's testimony.

Expert testimony in cases in which there is a question of mental competency involves so many legal technicalities that the physician must be guided by his lawyer. No two cases are alike but the court is likely to be governed by past decisions. Some of the complications which may arise can be illustrated by decisions in regard to competence in making a will. It has been recognized by the court that less mental capacity is necessary in making a will than in making a contract. Even in the presence of mental disease the will may be valid if the testator knows the extent and value of his property and the "natural objects of his bounty."

A person's competence to make a will refers to the exact date on which the will was made and the presence of mental illness at some other time may have little bearing on the validity of the will. The testimony of subscribing witnesses at the time the will was made has more value than that of experts whose conclusions are based upon hypothetical questions.

A physician actively engaged in medical practice could not be expected to be familiar with such legal details and he will therefore have to depend upon his lawyer. The lawyer, on the other hand, is equally uninformed about medicine and will look to the physician for assistance. The impression which the physician makes upon the judge or the jury depends as much upon his attitude and manner as it does upon his display of knowledge.

Other medico-legal aspects of psychiatric problems might be presented but such an undertaking would exceed the scope of this book. Instead, attention will now be called to some of the more important legal qualifications of psychiatric practice.

Inasmuch as it is a fundamental principle of law that no person may be deprived of liberty except by "due process of law," it is necessary that all who are interested in the welfare of the mentally sick should have some familiarity with the more common provisions and practices of the law. These pertain largely to the means of restricting the liberty of the mentally sick, their privileges during the period of this restriction, their rights in applying for recovery of liberty, and the care and management of their estates. Much variation in the law will be found in different states and countries, although the fundamental principles are quite similar. Some of the common provisions and practices will be described briefly.

Commitment. When, on account of mental illness, a person becomes incompetent to care properly for himself or for his property, the court assumes charge of both the person and the property.

There has been a gradually increasing recognition of kinds and degrees of mental illness, with the result that provision has been made for *voluntary admission* of a person who of his own accord seeks treatment. Such a person may apply for admission and receive treatment without court proceedings. If he is under twenty-one years of age the application is made by a parent, or his legal guardian, or by a next-of-kin. A certain printed form must be signed by the

<sup>9</sup> May, J. V.: Laws controlling commitments to state hospitals for mental diseases, Mental Hygiene, 5: 536.

person applying for admission. This form states that the applicant wishes to be admitted as a voluntary patient and that the nature of the hospital is known to the applicant. The patient agrees to abide by the rules of the hospital and to give in writing from three to ten days' notice of intention to leave the hospital. A voluntary patient retains all former legal rights, and is free to leave the hospital at the expiration of notice of intention to leave unless further steps for detention have been taken.

If a person is in need of psychiatric treatment and is incapable of making a voluntary application the law requires that the father, mother, husband, wife and children provide or obtain adequate care and treatment, if they are able to do so. Otherwise it is the duty of the health officer to see that the patient is admitted to a state hospital.

It is against the law to confine a mentally sick person in a jail or prison or in any other place than a state hospital or a duly licensed private institution. Such a person may be detained for a limited period for observation and treatment in certain approved psychiatric hospitals and clinics.

In case a person is confused or in such condition as to be unable to request or protest against admission, some states permit detention for treatment on the application of a relative, friend, or certain public officials, on condition that the applicant state in writing the nature of the illness and the need for treatment. The application is technically referred to as a *petition*. It is merely a simple statement of the patient's illness made by a responsible relative or friend, in the form of a request for hospital treatment. The petition must be accompanied by a certificate of *one* physician qualified to make examinations. The certificate of a qualified examiner must describe the way in which the patient is mentally ill and state that treatment is necessay in a hospital for mental disorders.

A qualified medical examiner must be a reputable physician who is a graduate of an incorporated medical college, who is duly licensed to practise medicine, and who has been in the actual practice of his profession for at least three years. He cannot act in the capacity of an examiner if he is a relative or has any business connection with the patient or if he is a member of the staff of the hospital to which the patient is to be committed.

A number of states authorize temporary care and observation for a

period of ten days, without court proceedings, upon a petition of a responsible relative or friend and upon certification by two qualified medical examiners. Such a commitment is called an emergency commitment. It may be used only when the patient needs immediate treatment. In extraordinary emergencies only, when there is no place for the proper detention of an acutely psychotic person and when it is unwise to wait for the preparation of a petition and certificate, the physician in charge of a hospital is authorized to receive such a patient on the application of a health officer. In such cases a regular commitment must be obtained within a given specified time.

A regular or legal commitment is essentially the same as the emergency commitment with the addition that a judge of a court of record, on receiving the petition and the certificates of two qualified medical examiners, formally commits the patient, usually to some specified hospital for treatment. Notice of application for commitment must be served upon the patient a day prior to the time at which the application is to be made. However, if service of such notice be detrimental to the health of the patient, the judge may omit such service or direct that it be made upon a representative of the patient. The patient, a representative, or the judge may request a hearing, sometimes before a jury, to determine the patient's mental condition and the need for treatment.

It is the duty of the physician in charge of a psychiatric hospital to refuse admission of an alleged mentally sick person unless commitment papers prepared in accordance with the law are at the same time presented, or if the person in the judgment of the physician does not require psychiatric treatment. The physician may use his discretion with regard to the admission of voluntary patients. If a person is held upon an order of a court because of a criminal offense, special arrangement has to be made with the court for his admission and discharge.

A commitment merely authorizes the detention of a patient for treatment. The patient, without court proceedings, may be discharged by the hospital authorities on recovery, or may be removed by responsible relatives, provided such discharge or removal is not detrimental to the public welfare or injurious to the patient.

Rights of committed patients. Committed patients may communicate in writing at any time with certain public officials, such as the state officials, judges and members of the state hospital boards.

They may interview the State Medical Inspector in person when he makes visits to the hospital. The patient or his representative may apply for a writ of habeas corpus, i.e., a writ requiring that the patient be brought before a court. In cases of chronic illness the court may appoint a person or persons who will thereafter be responsible to the court for the patient, his estate, or both.

Inebriate and mental defect commitments. Inebriate commitments are similar to those for the mentally sick, with the exception that the patient is committed on account of inebriety. The commitment is usually for a few months and for not longer than one year. It is often required that an inebriate be given notice a certain number of days before application is made for commitment. Mental defect commitments require that examinations of the patient be made by two examiners qualified to make intelligence tests. The commitment is to a hospital for the mentally defective.

Other important legal provisions. Commitment blanks may be obtained from any licensed hospital or organization interested in the care of mentally sick patients. Commitments are void outside of the state in which they are made. Certain large cities have their own legal provisions and practices. Reciprocal agreements may be made with another state for the prompt and humane return of a patient who has escaped from the jurisdiction of the state in which he was legally committed. Voluntary patients after leaving hospital grounds, and committed patients after leaving the confines of the state, may be transferred only on the responsibility of a relative or a responsible friend. When a regularly committed patient is discharged from a hospital the commitment is also automatically discharged. The patient regains former legal rights unless a "committee of person or property" has in the meantime been appointed, in which case former legal rights can be regained only through court proceedings.

The physician in charge of a mentally ill or feeble-minded person shall not permit the service of any legal process upon an incompetent person except upon order of a court having jurisdiction in the particular case. Service must be made in the presence of an official of the hospital. The patient's record must include a copy of the process served, and of the judge's order. Except as provided by law no mentally ill or feeble-minded person is permitted to make a will or to enter into any buiness or legal contract.

Marriage contracts in which either of the interested parties is mentally sick at the time of marriage, and especially if this illness is concealed, can usually be annulled. A marriage may be declared void by court if the husband or wife has been incurably mentally ill for a specified number of years, upon the proof of such illness submitted by qualified medical examiners. If it is the wife who is ill the husband must give security for her suitable care and maintenance during life.

Psychotic, feeble-minded or epileptic persons, psychopaths or chronic alcoholics who are aliens are excluded from admission to the United States. An alien who develops any of these defects or disorders within five years after entry and who becomes a public charge must be deported.

Mechanical restraint and seclusion may be employed only for surgical or medical reasons or to prevent the patient from injuring himself or others. Neither may be employed except on order of the physician in charge. No patient may be kept in seclusion or restraint continually.

The physician in charge of a hospital must send a report to the State Department of Mental Hygiene of all cases in which a patient has escaped or has received serious injury through suicidal attempt or the fault of an employee. In case a patient has escaped, the hospital personnel must make diligent search for him and then notify the police when necessary.

A hospital record is a privileged communication and it is therefore not available to anyone except the physicians on the hospital staff and to those physicians who may be called in consultation. It is a common practice to exclude from the official record certain intimate personal details which the patient has divulged confidentially. If a court order demands that the record be produced for inspection, care should be taken to surrender the record only at the time and to the person specified in the order. Upon the receipt of such an order a notation should be made of the date of the court order, the name of the court officer issuing the order, the name of the person and the place to which it is to be delivered, and the date on which the record is to be returned to the hospital.

### CHAPTER XIX

# PSYCHIATRY IN GENERAL HOSPITAL PRACTICE

Reference has already been made to the many ways in which psychiatric knowledge is being applied in the solution of human problems. A quarter of a century ago it was taken for granted that psychiatry was chiefly concerned with the care of the insane but since then this branch of medicine has grown so rapidly that it is now impossible for one physician to be expert in all of its departments. There are now several different kinds of specialists within the field of psychiatry.<sup>1</sup>

One of the latest of these developments has been the extension of psychiatry to general hospital practice. The approach was first made through out-patient clinics and psychiatric consultations.<sup>2</sup> This was followed by the establishment of psychiatric departments which have the same relationship and standing as other departments in general hospitals.<sup>3</sup> With the passing of the old fashioned family physician and the concentration upon new and scientific methods of studying diseases there has been a tendency to neglect the personality of the patient. On the other hand psychiatrists have been trained to consider illness in its broadest aspects and particularly the manner in which the patient's personality is affected.

The need of psychiatric knowledge and experience in dealing with all kinds of illnesses can be no more convincingly presented than by a review of some actual work in a general hospital. No attempt is made to present any case in detail but instead the more significant facts are given. Each case will be presented under the heading of the diagnosis made after the history had been taken and the physical examination completed. Only such comment will be made as may appear desirable to further elucidate the facts presented.

<sup>&</sup>lt;sup>1</sup> Brown, S.: Specialism within the field of psychiatry, Amer. J. Psychiat., 7: 583.

<sup>&</sup>lt;sup>2</sup> Henry, G. W.: Some modern aspects of psychiatry in general hospital practice, Amer. J. Psychiat., 9:481.

<sup>&</sup>lt;sup>3</sup> Heldt, T. J.: The functioning of a division of neuropsychiatry in a general hospital, Amer. J. Psychiat., 7:459.

### ACUTE RHEUMATIC FEVER

E. G. Female. 39. Housewife.

### Medical history

Complaint. Pain in joints. Feverish for two days.

F.H. Unimportant.

P.H. No previous serious illness.

P.I. Had sore throat about three weeks ago and since then not feeling well. Two days ago sudden pain in toes of both feet. On next day pains in left knee. Felt feverish.

*Physical*. Both knees moderately swollen, tender and slightly warm. T. 104.6°. W.B.C. 12,200.

Course. Given sodium salicylate gr. 10 q. h. and gr. 50 by rectum b. i. d. On evening of second day became noisy and delirious. Given paraldehyde. Removed to special room. Very little sleep.

### Psychiatric consultation

Under the stimulus of the arrival of the psychiatrist she does not present any obvious abnormality for a few minutes. Then she says she has been in hospital for ten weeks (actually one week) and is appreciative of care received. She becomes restless, moves the covers about and begins looking under them. Says that two or three days ago she "picked up four or five worms and threw them into the slop pail—had worms all over my legs—below the knees—don't know what it was—nearly drove me crazy. (Nurse passes by.) I wish you would stay out of here—bringing all sorts of stuff here—(picks at thighs)—I guessit's an itch—like worms crawling—that's why I want to get away--I don't get air here—just crawling up and down my legs all the time. The other night I saw a real elephant coming down the hall—that's what makes me scream— I get frightened—I see everything on the map. Seems as though I was in the garden last night picking peas. See people also-chickens, cows, cats, dogs, snakes—sounds like cats and dogs barking inside me. I hear things in the daytime and see things at night. I heard my brother talking to me today and he has been dead three months. They suck blood from my feet."

Patient was correctly oriented for place, person and year but was unable to give day of month and said it was Monday (Saturday) and July (April). Impression. Toxic Delirium induced by large doses of salicylates. In such conditions sedative drugs are contra-indicated. Force fluids. Stop all drugs.

Final diagnosis. Acute Rheumatic Fever. Toxic Delirium (Salicylates).

#### PERNICIOUS ANEMIA

E. B. Male. 55. Clergyman. Married.

Medical history

Complaint. Weakness and pallor.

F.H. Negative.

P.H. Dismissed from church for some irregularity and past few years engaged in business.

P.I. Growing weaker during past year. Six months ago told he had anemia and given a transfusion. Numbness and tingling in hands and lumbar region. Past three months dizziness and fainting spells.

Physical. R.B.C. 1,500,000. Hgb. 40%. W.B.C. 4,600. Polys. 52%. Gastric analysis shows no free HCl and total acidity 22%.

## Psychiatric consultation

Examination requested because he has thrown things at other patients and struck one of physicians. Somewhat apprehensive and only partially oriented. Too confused to comprehend routine procedures. Asks if he is going to be betrayed. Speaks of a lawsuit which he and a friend are going to bring against the hospital but he is not clear as to the grievance. Says he has been here a year and a few minutes later says he has been here two weeks, apparently with no recollection of his previous statement.

Final diagnosis. Toxic Psychosis with paranoid trends secondary to Pernicious Anemia.

#### FIBROSIS OF MYOCARDIUM

# W. V. Male. 43. Advertising. Single.

### Medical history

Complaint. Gas in stomach.

F.H. Mother subject to nervous disorders.

P.H. For the past 20 years drinking to excess, chiefly whiskey.

P.I. Recurrent attacks of constricting pain and dyspnea following exertion. Recently swelling of legs and voiding involuntarily.

Physical. Evidence of chronic myocarditis. Much enlarged liver. Marked edema below the knees. X-ray suggests luetic aortitis and interlobar pleurisy. Casts, pus cells and heavy trace of albumin in the urine. A few days before death partial heart block.

Course. Progressively worse. Towards the end confusion more marked especially at night.

### Psychiatric consultation (one week before death)

"You were here before, weren't you? (wrong)—Some of these concerts are spread out—up in the trees—one of the fellows says this is Tuesday, Thursday and Saturday period—it's advertised just in a tree—at other times from a widespreading tree." On the next day he said he felt fine, that he had seen the writer two or three weeks ago and had no recollection of having said anything about advertising in trees. He then added, "Now I see what you mean—on the ground, in the air and under the ground." "Can't remember when I came here—it was in the month of October (April)—don't know day—don't know why—can only ascribe it to the fact that I do very little reading."

Final diagnosis. Fibrosis of Myocardium. General Arteriosclerosis. Toxic Psychosis associated with terminal cardiac decompensation.

#### PARANEPHRITIC ABSCESS

## A. D. Female. 21. Dressmaker. Single.

## Surgical history

Complaint. Pain in left side near lumbar region.

F.H. Negative.

P.H. Unimportant.

P.I. For past two weeks pain in left side, nausea and vomiting.

Physical. Findings suggestive of renal calculus, paranephritic abscess or twisted ovarian cyst. W.B.C. 22,600. T. 102°.

Course. At operation found to have a ruptured kidney. Within a week had a nephrectomy and then a jejunostomy for intestinal obstruction. Condition progressively worse.

## Psychiatric consultation (two days before death)

Partially oriented, recognizes an aunt and at times knows where she is. Thinks it is the month of August (October). Restless, trying to get out of bed and wants to go home. Bites nails and digs at cuticle constantly. Says to nurse: "You didn't know I'd been in a coffin for twelve years, did you—just let me get out of this bed and look at that ice and I'll be a raving beauty." Suspicious of orange juice, says they put chalk in it instead of sugar. Refuses to take any fluid but says she will drink orange juice if permitted to prepare it herself. From her rambling remarks it was learned that three weeks ago while intoxicated she fell and struck her side against a bathtub. This was reluctantly confirmed by the aunt.

Final diagnosis. Ruptured Kidney. Toxic-exhaustive psychosis associated with terminal illness.

#### GENERAL ARTERIOSCLEROSIS

S. L. Male. 59. Upholsterer. Married.

### Medical history

Complaint. Shortness of breath.

F.H. Negative.

P.H. Urethral discharge at 18. Hemorrhoidectomy at 55.

P.I. Dyspnea and chronic cough for past seven years. Until recently relieved by adrenalin. Occasional attacks of rather sharp precordial pain. Three previous admissions to the hospital within a year.

Physical. Evidence of chronic myocarditis and general arteriosclerosis.

Course. More comfortable after removal of 500 cc. of fluid from chest. In one week lost all edema and able to sit up. Mental condition poor. Seemed to be more confused after being given digitalis.

### Psychiatric consultation

When patient is asked where he is he begins to talk about the place where he worked. Unable to say how long he has been here—"Maybe for eight days

—maybe for eight weeks." Can see words in the newspaper but unable to read it. In conversation he frequently used the wrong words. When shown a pen he called it a "front." When asked to identify other objects he makes the following errors: Key—"kleetz," spectacles—"messer," sheet—"teetz." Two days later when shown a pen he says he knows what it is but is unable to name it. When shown a key he indicates that he knows what it is by making the appropriate turning motion. He is still unable to say where he is and has great difficulty grasping the question.

Final diagnosis. General Arteriosclerosis. Fibrosis of myocardium. Hy-

pertension. Aphasia associated with cerebral arteriosclerosis.

#### PERI-RECTAL ABSCESS

W. E. Male. 52. Painter. Married.

Surgical history

Complaint. Pain in rectum.

F.H. Negative.

P.H. Gonorrhea twice. Ten years ago swelling of left testicle and dysuria for one week. Eight years ago hemorrhoidectomy.

P.I. Eight days ago sudden pain in region of rectum during defecation. Since then continuous pain and unable to sit comfortably.

Physical. Peri-rectal abscess.

## Psychiatric consultation

Shortly after admission during the night was disturbing other patients by his groaning. When nurse was about to give him a hypodermic injection he became more disturbed. On this account he was believed to be a "mental case."

Patient explained to the psychiatrist that sixteen years ago following injury received in a railroad accident and many hypodermic injections his arm became infected. Fear lest this experience should be repeated caused him to refuse this form of medication. Incidentally the abscess had ruptured during the night and patient was able to talk calmly about the whole situation.

Final diagnosis. Peri-rectal Abscess.

In the first case presented the delirious condition was due in part to infection and high temperature although it disappeared promptly when all drugs were stopped. Sedative medication in such cases merely adds to the excessive amount of toxic substances already present. A toxic psychosis is best treated by eliminating as far as possible the source of toxic substances, increasing the fluid intake and the elimination to the maximum and by providing constant nursing care.

The psychotic condition associated with pernicious anemia more often is an expression of the type of personality than of the disease

itself. When the anemia becomes marked, however, there is likely to be a delirious reaction.

A mildly delirious type of reaction is fairly commonly associated with a terminal illness especially when toxic, infectious and exhaustive factors are present. The fourth case illustrates the importance of listening carefully to the rambling talk of a delirious patient when it is desirable to obtain further information regarding the illness.

The case S. L. presented typical clinical phenomena associated with organic changes in an arterioselerotic brain. In such a case the aphasia is usually one of the manifestations of a terminal illness and as a matter of fact this patient died ten days later.

In the last case of the group presented above it seems obvious that a short conversation with the patient was most desirable. There was nothing in his explanation of his resistance to treatment which could not have been obtained the night before. Whatever the form of mental illness may be it is most important to listen to what the patient may wish to tell.

#### CHOLELITHIASIS

J. D. Male. 39. Salesman. Single.

Surgical history

Complaint. Attacks of weakness and fainting.

F.H. Negative.

to food stimulus.

P.H. Influenza 11 years ago. Malaria six years ago. Bleeding hemorrhoids two years ago. Smoked and drank to excess for many years.

P. I. Much belching and flatulence for the past two years. Private physician treated him for hyperthyroidism, giving him Lugol's solution.

Physical. Poorly nourished. Gall bladder test shows apparently numerous small stones and that the gall bladder is sluggish in emptying in response

# Psychiatric consultation

All male members of paternal side of family alcoholic. One brother who is a fanatic against drinking had a nervous breakdown. Patient began drinking at 18, becoming intoxicated at week-ends and on holidays. From the age of 23 he was known as a heavy drinker. Since the age of 30 has been drinking as much as a pint of whiskey per day. He drank to stimulate himself so that he could make a sale and then drank some more to celebrate it. "It seemed as though I needed something beside my own power to get along." He also drank to relieve indigestion.

He was the youngest child and very much attached to his mother. Since her death three years ago he has been drinking whiskey continuously. He drank as soon as he awoke in the morning and frequently he was unable to eat his breakfast because his stomach was too upset. "I've slacked up eating in the past five years—at times just ate a sandwich and malted milk—liquor did not mix well with food so I took as little food as possible—sometimes I went whole days without food." In the past five years he had lost 20 pounds in weight.

Until three years ago he had a sexual orgy about once per month. "I never went with a decent girl—never had the slightest idea of marrying."

About two years ago became sick on the road and had to be driven home. Since then "I'd get in a dazed condition when I drank—I couldn't handle myself at all—felt all gone—lost all sense of balance—I didn't fall down but I'd have to be careful in order to avoid running into people. It's a nervous affection of the stomach—I've noticed that gas comes with this. I'd get dizzy if I looked up or down—it took very little to get me excited—if a child cried or if a lot of people were around I'd get nervous. I couldn't concentrate—if I wanted to write a word I'd have to think how to spell it. It seems that my mind was always ahead of my body. I felt that I should do something to help myself but I didn't know what to do. I've been to many doctors—they said my heart and stomach were all right—they didn't seem to be able to find out what it was. I felt that if I could remove that one condition, I'd be all right."

Final diagnosis. Mental deterioration associated with chronic alcoholism. Chronic gastritis. Cholelithiasis.

### CEREBRAL SYPHILIS

C. S. Female. 37. Housekeeper. Widow.

# Medical history

Complaint. Pain in Abdomen.

F.H. Unimportant.

P.H. Has been in the habit of taking four or more alcoholic drinks per week.

P.I. For more than a year troubled with epigastric pain, distention and belching after meals. The pain was not related to eating. It has been much worse recently and accompanied by severe vomiting spells during which small amounts of bright red blood appeared. For the past few months she has been frequently disoriented as to time and place, often talked of the past, occasionally believing that deceased friends were with her. She had considerable difficulty getting around, would feel her way along the wall and at night would fall over the furniture. For the past three weeks was scarcely able to walk and complained of stiffness and numbness of her legs.

Physical. K.K. and A.J. absent. From history a provisional diagnosis of cerebral syphilis was made. Wassermann later found to be negative.

## Psychiatric consultation

Admits drinking 2-6 glasses of whiskey per day. "If I drink too much it makes me dizzy—had a drink this morning at home with mother (mother is dead)—been here two days (8 days)—wasn't home this morning—it's Sunday (Thursday)—was home yesterday—mother is sick—had a drink with her."

She does not know the day or the part of the month and can't remember when she was married. She can easily be led to fabricate recent events and does not realize that she makes inconsistent and contradictory statements during the interview. Two days later she said she did not stay in the hospital at night and that she had a warm drink at 10 A.M. which she brought with her from home. (She had actually been confined to bed in the hospital for 10 days.) She complained of pain in her legs and difficulty in walking. There was definite tenderness of the calves of the legs and inner surfaces of the thighs. K.K. and A.J. were not obtained.

Final diagnosis. Acute Korsakoff's Psychosis with Polyneuritis.

#### GASTRIC ULCER

L. W. Male. 29. Pathologist. Married.

### Medical history

Complaint. Acute pain in abdomen. Vomiting blood.

F.H. Father a physician.

P.H. Early life not unusual. Eight years ago indigestion and epigastric pain 1½ hours after eating. At operation a chronic appendix was found. Symptoms continued. Three years ago gastroenterostomy. Relief from pain for nine months. Eighteen days later first gastric hemorrhage. Two weeks ago—large hemorrhage—given 500 cc. blood infusion. Stools occasionally tarry since perforation.

P.I. A few hours before admission and one hour after eating, acute abdominal pain radiating to back and right shoulder. Vomited about a pint of bright

red blood.

Physical. Three linear post-operative scars in abdomen. Exquisite tenderness in upper abdomen, especially in epigastrium. Diffuse rigidity over entire abdomen. Dullness in flanks, not shifting. T. 101°. R.B.C. 3,500,000. Hgb. 60%. W.B.C. 18,400. Polys. 89%. B.P. 120/60.

Course. Put on special diet but ate other food surreptitiously. Attempted to leave hospital before fluoroscopic examination was made which revealed no evidence of ulcer or operation. Given morphine with little effect. When morphine stopped, became restless, nervous and insisted upon leaving the hospital.

## Psychiatric consultation

Scrutinizes psychiatrist and very cautious in giving information regarding himself. Regards himself as being "radical." Since domestic trouble and divorce four years ago has lived by himself, obtaining satisfaction from music, literature and his work. Finally admits having taken a grain of morphine q. 5 h. for past 20 weeks. Multiple linear scars on forearms suggest that he is a blood donor. Responses from two of hospitals where he claimed to have had abdominal operations state that no record was found of his admission.

It was concluded that present illness was faked in order to obtain morphine.

Patient abruptly left hospital against advice.

Final diagnosis. Psychopathic Personality. Drug Addiction (Morphine). Gastric Ulcer (?).

### EXOPHTHALMIC GOITRE

C. B. Male. 50. Druggist. Single.

## Surgical history

Complaint. Nervousness and swelling of thyroid gland.

F.H. Negative.

P.H. Gonorrhea at 23. Operation for anal fistula at 42.

P.I. Following business failure five years ago became nervous, developed tremor of fingers, palpitation and dyspnea along with swelling of thyroid gland and slight exophthalmus. In two months he lost 40 pounds. Two months ago there was a recurrence of this difficulty. In addition there has been insomnia and spells of sweating and diarrhea.

Physical. Slight exophthalmus and nodular, firm thyroid. Basal metabolism normal.

# $Psychiatric\ consultation$

General health good until five years ago when a well-known wealthy woman agreed to finance a pharmacy for him. When this business had been established she announced that her real interest was to obtain morphine. When the patient refused to deliver this she withdrew her support. He then had to close the business at a loss of \$22,000, his life's savings. Immediately after this he became nervous, tense, worried and had digestive disturbances. Within a few months he lost over 70 pounds in weight. He firmly believed that he had tuberculosis and that he was going to die. When he was about to commit suicide a friend suggested that he be examined by a physician. He then learned that there was no evidence of tuberculosis but some manifestations of exophthalmic goitre. Under treatment he rapidly gained his former state of health and a year later he returned to work.

Five months ago he got an idea that he could make a lot of money in an advertising business. He was financed again by an unscrupulous person and as soon as the business began to prosper he found that he was being forced out. Immediately following this discovery he had severe abdominal cramps which recurred after eating. He tried to treat himself with various medications but without success. He gradually stopped eating and within two months he lost 30 pounds in weight. He became convinced that he had a gastric ulcer. Four days ago he decided to settle the business matter through his own lawyer. After this was done he had no further digestive disturbance. He is now inclined to feel that his trouble was "nervousness."

Final diagnosis. Psychoneurosis—anxiety and hysterical symptoms. Exophthalmic goitre (?).

In the first of the above group of cases presented an operation for the removal of gall stones was being seriously considered. When the report of the psychiatrist was obtained and in view of the fact that the patient was a poor risk the operation was indefinitely postponed. With excessive drinking and such a marked reduction in the amount of food ingested delirium tremens might have been expected but patient denied ever having had this experience.

The case C. S. presented the most common manifestations of an acute Korsakoff's psychosis. There may be considerable improvement in the general condition of both of these cases of alcoholism after a long period of hygienic living and total abstinence from alcohol but as a rule the defect in the mental functions is permanent.

The last two of the above group of cases illustrate the extreme measures which may be taken by addicts in order to obtain more of the drug which they are using. They also illustrate the need of a psychiatric scepticism in evaluating the symptoms presented. In the case L. W. the patient's general attitude and behavior were not consistent with the presence of a serious physical illness. The case C. B. also illustrates the extent to which a person with medical knowledge may become apprehensive of various physical illnesses and eventually present a clinical picture which is exceedingly misleading.

#### CHRONIC APPENDICITIS

G. M. Female. 29. Housework. Single.

Surgical history

Complaint. Pain in abdomen.

F.H. Negative.

P.H. Inclined to be obese. Just before present illness weighed 205 pounds.

P.I. For the past eight weeks dull and almost constant pain in R.L.Q. At times this pain is sharp and there is an associated tenderness in the abdomen. Appetite poor. Lost 35 pounds in weight. Occasional vomiting and abdominal distention after meals. Much belching.

Physical. Moderate tenderness over McBurney's point and marked tenderness in the region of the right ovary. Conclusions from G.I. series were (1) Periduodenal Adhesions (2) Spastic Colitis (3) Appendix which is fixed and directed upwards. Graham test suggests gall stones.

Course. Exploratory laparotomy with appendectomy. Pathologist reports "chronic appendicitis." No other pathology found in abdomen or pelvis. Recovery uneventful until two weeks after operation when she attempted suicide by drinking a bottle of hair remover. Psychiatrist advised placing her under special observation in a psychopathic hospital. She was taken home by her mother against advice. The same night she attempted suicide again by drinking iodine. Readmitted but in a few days was again removed by her mother. Became unmanageable at home and was finally admitted to a psychopathic hospital.

### Psychiatric consultation

From information obtained from the patient, her mother, a girl friend and the family physician the reconstructed account of her illness is as follows:

For some time prior to the onset of symptoms the patient had not been feeling well and on the advice of her mother she stopped work to assist her mother in keeping a boarding house. Instead of helping her mother she spent her time in the room of the girl friend, waiting upon her, caressing her and in other ways manifesting unusual affection. When the mother remonstrated the patient went on a hunger strike for a week. It was following this that the patient had abdominal complaints, chiefly of pain in the epigastrium. The patient claims that she told the surgeons about these pains but they "did not pay any attention." She states also that she was not relieved by the operation.

The girl to whom she had been devoted did not reciprocate her affection and left the home of the patient. Following this the patient became despondent. During an interview she stated that she believed she would recover promptly if she could regain the affection of this girl and that otherwise she had "nothing to live for." It was learned also that her first suicidal attempt followed the transfer to another ward of a nurse with whom she had fallen in love. "One of the nurses here I'm crazy about—she was so sweet—if she was here I'd be so happy I don't know what I would do."

During the interview following the second admission she said: "Last time I was here I dreamed a man stood right by my bed, grinding his teeth and said he was going to throw me into the ocean. I always imagine there is a man hiding somewhere in my closet." "Last night snakes crawled on my face, neck and arm—they made a lot of noise and tried to bite me—I was afraid to go to sleep and stayed awake all night." "Nothing seems to go my way—everybody goes against me."

Final diagnosis. Acute Psychosis, probably schizophrenic. Chronic appendicitis.

#### TUBERCULOSIS OF ELBOW

E. C. Male. 24. Student. Single.

#### Medical history

Complaint. Pain and swelling of left elbow.

F.H. Negative.

P.H. Essentially negative.

P.I. Seven weeks ago left elbow became swollen, stiff and sore. Any movement of joint was painful. Condition became progressively worse.

Physical. Evidence of tuberculosis of left elbow. X-ray suggests early tuberculous changes at right apex of lung. (Behavior rather peculiar.)

### Psychiatric consultation

Throughout the interview the patient maintained a fixed posture. His head was turned to the left, his eyes were fixed upon the pillow and his right hand was constantly pulling downward on the left hand. When the right

hand was disengaged he continued pulling on the bed clothing. For at least ten minutes he lay keeping his head slightly raised above the pillow. He recognized that he had some trouble with his elbow, admitted that he worried about it for a while but had no complaint at this time. He moved his head and eyes on request. He did not seem concerned about his stereotyped posture even when his attention was called to it. Responses were abrupt, somewhat automatic but relevant. No spontaneous talk. For the past year he had lived by himself and had no friends.

Final diagnosis. Tuberculosis of Left Elbow. Catatonic Dementia Praecox.

#### FRACTURED FEMUR

### P. W. Female. 37. Clerk. Single.

## Surgical history

Complaint. Pain in stomach, left hip and knee following being struck by a truck.

F.H. Negative.

P.H. General health good.

P.I. Brought to hospital after being struck by a truck and knocked unconscious.

Physical. Fracture of left femur at junction of upper and middle third.

Course. A few days after the leg had been placed in a cast patient removed it causing bad alignment of a previously well set fracture.

## Psychiatric consultation

Patient says: "I have acid in my body—I can feel it moving about—they told me I had malaria because I slept so much—my hair is turning red." She wants to know why her leg is "stiff and swollen" and says she took off the cast because it was "wet with urine." "I thought I was in prison but it was just imagination."

In spite of these spontaneous productions patient lay quietly in bed, answered questions promptly and relevantly and on casual observation did not appear abnormal. Somewhat reluctantly she admitted that she had been a patient in the M. State Hospital for a period of over two years.

Final diagnosis. Fractured Femur. Paranoid Dementia Praecox.

#### MYOMA OF UTERUS

## L. B. Female. 37. Dressmaker. Single.

## Surgical history

Complaint. Pain in upper part of abdomen on right side.

F.H. Negative.

P.H. Has had typhoid fever and pleurisy.

P.I. For the past five years irregular painful menstrual periods with menorrhagia.

Physical. Negative except for large uterine fibroid tumor.

Course. Supra-vaginal hysterectomy performed. Recovery uneventful until sutures were removed when patient tore open the wound with her hands.

## $Psychiatric\ consultation$

"I received a B.A. degree in grammar school in the South at the age of nine. I've been writing since the age of ten. One book was called the 'Moral of Youth'—29 pages of episode taken from the Bible. My writings were stolen from the mail. They are now used in plays in New York. I sent it to the court house because Congress has to act upon it. People repeat what I say—people say I have corrupted the morals of young people." Patient lay quietly in bed while she talked spontaneously in this manner.

Final diagnosis. Myoma of Uterus. Paranoid Dementia Praecox.

In the above group of cases the first is perhaps the most instructive. In spite of the laboratory findings there may be some difference of opinion as to whether an operation was indicated. It is not improbable that the operation was an important factor in precipitating a malignant psychosis. A purely surgical or medical history is seldom adequate.

The nature of the mental disorder in the other cases is indicated by the quality of the behavior and talk of the patients. The rigid, stereotyped posture of E. C. and the bizarre ideas expressed by P. W. and L. B. are characteristic phenomena observed in schizophrenic psychoses. A psychiatric investigation of such cases immediately after admission to the hospital is a necessary safeguard against many possible serious complications.

#### ACUTE APPENDICITIS

### R. B. Male. 13. Student.

### Surgical history

Complaint. Acute pain in lower abdomen, right side.

F.H. Maternal grandmother a patient in a State Hospital.

P.H. General health good.

P.I. Six days ago had pain in L.L.Q. lasting few hours. Told family physician he had pain in the appendix region. Admitted to hospital as a case of acute appendicitis.

Physical. Essentially negative.

## Psychiatric consultation

An only child who was never disciplined. He was spoiled by his parents, a wealthy aunt and the grandparents. He was idolized by his father. Fond of the movies and cheap, exciting novels. Difficult to manage in parochial school. Placed in three different boarding schools "so that he could be watched better"

but from each of these his removal was requested because he would not study and he interfered with the other children.

Just before his pretended illness he had been placed in another school. He did not like the teacher and deliberately feigned illness in order to get away.

Final diagnosis. Psychopathic Personality. Spoiled Child.

### DUODENAL ULCER

# F. D. Male. 26. Steward. Single.

## Surgical history

Complaint. Pain in lower right abdomen and vomiting.

F.H. Unimportant.

P.H. General health good until present illness.

P.I. Onset gradual with epigastric distention and pain. This occurred about 20 minutes after eating and was relieved by taking food.

Physical. Duodenal ulcer revealed by x-ray examinations.

Course. After agreeing upon operation fled from the hospital. Returned in three weeks and gastroenterostomy performed. Since fifth post-operative day persistent vomiting. No physical basis found. Attacks of restlessness and rambling talk.

## Psychiatric consultation

Since childhood drank 10-15 cups of tea or coffee per day. Has lived alone for years—"that's my trouble I guess." Mother a patient in H.R. State Hospital for past 23 years. Two brothers bite their finger nails until they bleed.

During the interview he expressed great concern over the condition of his digestive tract. He said no one had told him what was done at the operation and he supposed that his stomach had been separated from his intestines. He thought his stomach then became a blind pouch and that there was no alternative but to vomit what he had eaten. When the procedure was explained to him he expressed his surprise and relief with: "Then the food can go through." There was no further vomiting and during the next week he gained ten pounds.

Final diagnosis. Duodenal Ulcer. Psychopathic Personality with psychoneurotic tendencies.

#### EXOPHTHALMIC GOITRE

## W. P. Male. 38. Bank Clerk. Married.

## Surgical history

Complaint. Nervousness and prominent eyes.

F.H. Negative.

P.H. Six years ago gangrenous appendix removed.

P.I. For the past two years has been nervous and has noticed a swelling of the thyroid gland as well as slight prominence of the eyes. He has lost 18 pounds in weight. Six weeks ago private physician suggested rest treatment and prescribed potassium iodide.

Physical. Slight exophthalmus. Hyperactive deep reflexes. Basal metabolism normal.

Course. One consulting internist believed there was thyro-toxicosis and suggested that his teeth, which were in very bad condition, were without doubt foci of infection. Another internist suggested an effort syndrome. Thyroid operation was postponed until a report was obtained from the psychiatrist.

## Psychiatric consultation

Patient says that he was discharged from the army several years ago because of "heart strain" which lasted about three weeks. The present illness began abruptly two years ago following an altercation with a neighbor in the same apartment who insisted upon playing a piano late at night. The next day he had a feeling of dull pressure in the entire right half of his head. This lasted several days and until he was treated medically. He is somewhat tense, alert, talks deliberately and apparently frankly. (It was learned after several interviews that both he and his wife concealed important facts. The following account was finally obtained from his wife. She had been afraid he would lose his position if the facts became known.)

Sister very wilful and epileptic. Wife told patient he would be the same if he did not control his temper tantrums. He was always shy and sensitive and did not kiss her before marriage. Sexual relations were always painful and a year ago she told him that she did not want to have children because she was too old (33). Her only pregnancy was terminated by miscarriage which she induced. Her husband is not aware of this however. Previous to this miscarriage he had a cheerful disposition and was a good companion. Since then he has been lacking in energy and would fall asleep at night sometimes before he had finished eating. For 18 months before admission was taking adrenalin residue and iodine pills.

The patient maintained that their domestic life had been satisfactory but this was not confirmed by his wife. In the past six years he has twice attempted suicide. A year ago he tried to stab himself but his wife struggled with him and told him she would jump out of the window if he made another attempt. A month ago following a quarrel he took a belt to the bath room to hang himself. His wife distracted him by taking a large dose of hypnotic medicine which caused her to sleep for three days. She told him she had been through hell and didn't care to live.

His wife states that since marriage he has been drinking to excess periodically. He did not tolerate whiskey and frequently became "paralyzed." Last Christmas Eve she had made a special effort to prepare an attractive dinner. After the table had been set patient came home intoxicated and turned the table and its contents upside down.

Final diagnosis. Psychopathic Personality. Chronic Alcoholism. Exophthalmic Goitre.

The diversity of problems presented by the three cases just presented is rather characteristic of any group of psychopathic individ-

uals. Regardless of their situation in life or whatever the circumstances may be at any given time if left to their own resources they are prone to get into difficulty.

A year after his discharge from the hospital it was learned that the boy R. B. continued to be indulged and neglected by his family and was "running wild" in the community. F. D. had a recurrence of his pre-operative symptoms seven months later but it appeared that they were largely psychoneurotic. The slight prominence of the eyes of W. P. became less evident when medication was stopped and his mode of living became more hygienic.

### GASTRIC CARCINOMA

## J. K. Female. 47. Housewife.

## Medical history

Complaint. Stomach trouble.

F.H. Negative.

P.H. Four miscarriages. Chronic constipation. Eructations and heart burn for many years. Frequent attacks of pyelitis.

P.I. Two months ago tarry stools and since then shortness of breath and weakness. Lost 15 pounds in weight. During past week pain in epigastrium 15-30 minutes after eating. Friends remarked upon increasing pallor.

Physical. All findings including x-ray examinations and blood chemistry negative.

### Psychiatric consultation

Marital difficulties since marriage but increasing in recent years. "My husband wants to get rid of me—he has not worked in six months and spends his time gambling. When I ask him for money he strikes me and tells me to go to work like I used to." Diet. For the past year she has lived on herring, bread and potatoes. "When I have anything better I give it to the children—used to have better food." Pain. Consists of "heart burn," difficulty in breathing, feeling of stiffness and inability to talk. Appears 10–15 minutes after eating and is relieved by belching and soda. Pains in her right shoulder for years. (Relieved by recent venipuncture.) Has no pains when she eats at her sister's home. Stools. Has taken enema once or twice daily for past year. Tarry stool consisted of "burnt particles" in enema return. Cathartics. Takes either or both epsom salts and castor oil daily. Otherwise she has "terrible headaches."

Final diagnosis. Psychoneurosis—neurasthenic and hypochondriacal symptoms associated with very poor hygiene.

#### SYPHILIS

## P. M. Male. 38. Tailor. Single.

## Medical history

Complaint. Pain in stomach.

F.H. Negative.

P.H. No serious illness until a few years ago when he began to have trouble with indigestion, belching and constipation.

P.I. Six days ago began to have thumping pain in the epigastrium one hour after meals. He regurgitated a watery substance which had a bitter taste and was obstinately constipated.

Physical. Negative except for slight epigastric hernia and 4 plus Wassermann.

# Psychiatric consultation

He has been nervous since he was 10 years old—easily teased and sensitive to noises or "foolish talk."

Five weeks ago he was admitted to St. V. Hospital because of indefinite pain in his chest and was discharged nine days later with negative findings. A private physician then told him that his lungs were a "little weak." In order to get strong he ate several eggs and drank  $2\frac{1}{2}$  quarts of milk per day. This did not agree with him. He began to have pain in the epigastrium. Another physician told him it was just gas and not to worry. His landlady suggested that he might have heart trouble and that he should go to the N. Hospital. There was no pain or distress after the first day in this hospital.

Final diagnosis. Psychoneurosis—neurasthenic symptoms. Syphilis.

#### ANGINA PECTORIS

### T. M. Male. 34. Teacher. Married.

### Medical history

Complaint. Difficulty in breathing for the past six months.

F.H. Unimportant.

P.H. General health good until present illness.

P.I. During past six months insomnia associated with difficulty in breathing. Lost 25 pounds. In the past two months difficulty increasing and associated with pain in the region of the heart. Private physician suggested that he might have angina pectoris.

Physical. Essentially negative.

## Psychiatric consultation

Father and one sister said to be nervous and high strung. Patient had a period of nervousness six years ago similar to present illness but less marked. This was treated successfully by hygienic measures.

After marriage two years ago he gradually became aware of his wife's limited intellectual capacity and the fact that they had very little of common

interest. For over a year he has been harrassed by his mother-in-law who is mentally unbalanced. His wife will not acknowledge this fact and moreover she is dominated by her mother. His wife has been in the habit of cooking the meals for the day early in the morning. She leaves them in the oven and then spends the remainder of the day with her mother. Patient frequently goes to his own mother's home "to get a good meal" and then tries to eat the meal cooked by his wife so that she will not be offended. Mother-in-law sometimes comes to his home at midnight to claim something which she believes was stolen from her. On one occasion when patient accompanied a boy to school she circulated the rumor that he was taking the boy to immoral houses. On another occasion she left their only child outdoors improperly clad with the result that the child became seriously ill.

Since marriage he has been teaching both day and night school without taking time for recreation or exercise. His appetite and digestion have been poor and he has been very constipated. In order to keep going he drank tea at every opportunity throughout the day and evening.

After he had been told that he might have angina pectoris some of his friends told him that it was a "terrible disease" and that he might drop dead at any moment. When seen by the psychiatrist he was extremely apprehensive regarding his health, his home and his child and he was convinced that he was about to have a "stroke."

Final diagnosis. Anxiety Neurosis (associated with very bad hygiene and an actual difficult situation).

### MEDIASTINAL TUMOR

### E. M. Female. 28. Housewife.

### Medical history

Complaint. Difficulty in breathing.

F.H. Negative.

P.G. Appendectomy at 15. Tonsillectomy at 20.

P.I. For the past three months has had great difficulty in breathing. She tired easily, was very nervous, had palpitation, terrible headaches and pain between the shoulders,—"gets stuffed up in the throat—this bothers me terribly (under upper sternum)." Examination in O. P. D. suggested substernal thyroid.

Physical. Blood Wasserman 3 plus. Basal metabolism normal. Provissional diagnosis of mediastinal tumor made.

#### Psychiatric consultation

Mother died when patient was two years of age. Father "always drank—never took care of us (weeps)—that's all I ever saw all my life." Reared by grandparents and had to leave school at 10 to support them. "I was the slave for all of them—they all looked down on me because my father was like he was, but I can't help it—when I got married I got the same thing from my husband's people."

Always troubled with shortness of breath. One physician treated her for asthma and another told her she had a goitre.

Married eight years ago because husband insisted. She was rather indifferent toward him and did not want to get married. She claims she was somewhat ignorant of sexual affairs and has remained frigid. They now have three children although not financially able to take care of any.

Present difficulties began six months ago when husband and children became sick. They soon got in debt and patient gradually stopped eating so that the children might have food. She tried to keep going by drinking coffee and for several weeks before admission she drank three cups of tea, occasionally some cocoa and a pot of coffee per day. She became sleepless, very nervous, and developed the symptoms recorded in the medical history. This continued until she felt she could not go on and finally she collapsed. In a tuberculosis clinic she says she was told that she might have a goitre pressing on her heart.

Final diagnosis. Psychoneurosis—anxiety symptoms resulting from very bad hygiene.

#### HYPERTROPHIC OSTEOARTHRITIS

### M. F. Female. 49. Housewife

## Medical history

Complaint. Pain in abdomen and lumbar region.

F.H. Negative.

P.H. Mastoidectomy 12 years ago. Tumor removed from lumbar region one year ago. Appendectomy three weeks ago. Last menstrual period two years ago.

P.I. Mucous in stools and diarrhea for past year and terrible pain in the back.

Physical. X-ray of lumbar spine shows a slight roughening of the articular facets. Both sacro-iliac joints show definite roughening and condensation of bone indicating hypertrophic osteoarthritis.

### Psychiatric consultation

"Can't eat anything—it's just the same as if my stomach was closed—no ventilation at all—dry vomiting—untold suffering the minute I get up in the morning—can't eat anything since the operation four weeks ago—can't sleep—burning pain—all I can do is drink water—my body gets all heated up—burning internally just the same as a coal of fire." The patient is not depressed.

Final diagnosis. Psychoneurosis—neurasthenic and hypochondriacal symptoms.

#### NEPHRITIS

I. S. Female. 52. Housewife.

Medical history

Complaint. Difficulty in passing urine.

F.H. Negative.

P.H. Broncho-pneumonia five years ago. Frequent headaches and dizzy spells. "Nearly went blind" two years ago.

P.I. Past few weeks difficulty passing urine.

Physical. Negative.

## Psychiatric consultation

Nervous all her life. During past three years frequently aroused from her sleep by a choking sensation and a feeling of electricity passing through her body. She was also troubled because she had to pass large quantities of urine. Apparently she did not associate this with her habit of drinking four cups of tea, four cups of coffee, one pint of milk and two cups of hot water daily. Four months ago a physician gave her tablets which she says made her perspire so much that her clothing was soaked. She also reduced the fluid intake to three glasses per day. When she voided much less she stopped taking fluid and ate very little. She thought that "poison was accumulating in her body" and that she would become bloated if she took any fluid. Another physician suggested that she might have nephritis and urged prompt admission to the hospital. She was very anxious to know the result of examinations and was surprised to learn that she did not have diabetes or nephritis. Further investigation revealed the fact that she had been interested in her genito-urinary system since her first marriage thirty years ago to an actor who had syphilis. She had thought that she might have been infected by him.

Final diagnosis. Psychoneurosis—neurasthenic and anxiety symptoms.

#### CHRONIC APPENDICITIS

### M. W. Female. 29. Student.

## Surgical history.

Complaint. Severe headache, constipation and occasional vomiting.

F.H. Unimportant.

P.H. Rather careless about diet, constipated and headaches for many years.

#### 1923

March. First Admission. Headaches more severe and unable to work. Diagnosis—Migraine. Discharged in three weeks improved.

#### 1924

July. Second Admission. Has had frequent attacks of tonsilitis and rheumatism. Severe headache, constipation and occasional vomiting. Appeared chronically ill. Tonsillectomy performed. Discharged improved.

#### 1925

July. Third Admission. Irregular attacks of vomiting. Said to have vomited blood at times. Examinations show a kinked retrocecal and very tender appendix as well as pylorospasm.

August. Appendectomy and exploration. Pathologist reports chronic appendicitis.

September. Signs of intestinal obstruction. Duodenal jejunostomy performed and this was followed by transfusion.

October. Drainage of gall bladder. Gastro-enterostomy and enteroenterostomy performed because of continued vomiting. Discharged after four months in hospital.

#### 1926

January. Fourth Admission. Losing weight and recently vomiting everything eaten. Cholecystectomy and pyloric resection performed. Many adhesions found.

May. Fifth Admission. Complaining of continuous pain and vomiting. Diagnosis—Peritoneal adhesions. Discharged improved two months later without operation.

# Psychiatric history

F.H. Grandmother peculiar, pessimistic, impulsive. Mother always very nervous. Sister aggressive, suspicious, and a drug addict, at one time committed as an inebriate.

P.H. Delicate child. Severe periodic headaches beginning at 13 accentuated by school work. Frequently took powders for headaches. Inhaled fumes of chloroform used in botanical work and at times completely under its influence. Also took veronal and on one occasion took an over-dose. Never contented and frequent quarrels with associates. Jealous of older sister since childhood. Always difficult to manage. Secret love affair which could not be made public. Since adolescence has preferred to be with girls.

Headaches, constipation and vomiting as recorded in surgical history. It should be added that throughout the surgical treatment patient was given sedative drugs including chloral, codeine and morphine.

After the final discharge from the surgical hospital her symptoms returned. She was then treated by private physicians who gave her sedative drugs. At one time she was taking as much as eight grains of codeine per day.

#### 1926

October. Comes to a psychiatric clinic under the influence of drugs. Has been nervous, tense and for the past few weeks her memory has been failing. Her gait is ataxic, talk incoherent and memory poor. She is very abusive in her language because she is not given further operative treatment.

November. Admitted to a psychopathic hospital. Within three months she gained 36 pounds and her symptoms practically disappeared. She then left this hospital against advice.

#### 1927

April. Readmitted to this psychopathic hospital. Two months ago began taking drugs again because of severe abdominal pain. Has been taking bromo-

seltzer, luminal and morphine. Symptoms again practically disappeared and there was a marked gain in weight. At the end of six months she left the hospital against advice. It was learned later that the aggressive sister wished to have the patient committed as an inebriate so that the commitment could be used as evidence in bringing suit against the surgical hospital for giving drugs to the patient.

Final diagnosis. Psychopathic Personality. Drug Addict. Gastric

Neurosis.

#### SARCOMA OF ABDOMEN

# A. P. Male. 23. Unemployed. Single.

## Surgical history

Complaint. Sharp pain in L.U.Q. radiating up over chest to shoulder around to back and down the side of the left leg.

F.H. Negative.

P.H. Typhoid fever at 13. Appendectomy at 18.

P.I. About  $2\frac{1}{2}$  years ago noticed a weakening sensation in upper back which made him feel like fainting. Three months later food began to be regurgitated, even up to his nose. He had a gnawing sensation which was immediately made worse by food, his left arm became very weak. His bowels at first became constipated, movements about every five days; this continued for about a year accompanied with the flatulence, abdominal pain and regurgitations. Then there was a month of diarrhea; after that, his bowels were irregular, three movements one day and none the next. The regurgitations have decreased in frequency. He has a "pulling sensation" in the left side which is often provoked by swallowing. Cold water gives him a sharp pain in the epigastrium. His stools have been very light. He feels the gas bubbling.

Physical. History and physical examination suggest tumor of abdomen-

sarcoma.

Course. Subsequent examinations negative. After psychiatric consultation discharged to Psychiatric Clinic with diagnosis of psychoneurosis.

# Psychiatric history

Complaints. "Clenching-like feeling in back." "I feel that a lump here (left of umbilicus) has got to come back. I feel a drawing down inside. Back of the lump my insides fall through and I can pull them back up. I have pains from all around almost inside of the bone."

F.H. Unimportant.

P.H. Public school education. Studied music without much success. Emigrated from Russia at the age of 17. Failed to adjust in any place of

employment.

P.I. Two and one-half years ago felt something "inside of left side of stomach...a heaviness, gases discharged from throat and that weakened me generally. Felt a tenseness or contraction in chest muscles or between the spine and shoulder that weakened my left arm. Came on suddenly, gradually getting worse. Stomach trouble appeared first. Stomach muscles weakened

and the inside tends downward. Then noticed hard masses beneath the navel and I'd have to draw them back by exhaling or pulling in the abdominal muscles. A year ago was blown up with gas. This weakened all the lower muscles. There was a sensation of drawing downward which shifted to the left groin. For over a month pain in both hips and legs, mostly in left leg."

As this patient appeared to have had considerable treatment for his illness his medical record was investigated.

# History of treatment for present illness

#### 1927

January. Private physician—treated for a "cold."

V. Clinic. Neurological Department.

May. J. Hospital. O.P.D. G.I. Department.

July. J. Hospital. Medical Department.

July. Neurological Department.

August. Gastric ulcer suspected. X-ray examination negative. Diagnosis—Neurasthenia.

B.H. Convalescent Home-two weeks.

G.V. Convalescent Home—two weeks.

Private physician diagnosed "chorea minor."

October. Mt. S. Hospital. G.I. Department. After ten days' examination findings negative. Treated in O.P.D. for over a year. Then sent to Neurological Department. Findings negative. Sent to Medical Department. Diagnosis—Psychoneurosis.

For the past year treated by a psychoanalyst.

Sent to H.H. Sanatorium. After two months advised to go to work. In curative work shop for a while but didn't feel good.

December. V. Clinic. Neurological Department. Sent to B. Hospital. About to be committed. Removed by uncle against advice.

Two private physicians. Findings negative.

#### 1928

April. L.C. Hospital. O.P.D. Neurological Department.

May. B. Hospital. O.P.D. Medical Department.

E.D. Clinic. Sputum examined. Negative.

L.C. Hospital. O.P.D. Medical Department.

June. R.C. Hospital. Acute pain in kidney region. Diagnosed Nephrolithiasis. Sent to B. Hospital. Cystoscoped. Discharged after nine days with diagnosis of Neurasthenia. Sent to O.P.D. but didn't go—"I was there before and they couldn't find anything."

April-July. Attending B. State Hospital Clinic. Admitted as voluntary patient July 25th. Discharged Dec. 24th. Diagnosis—Psychoneurosis.

December. St. L. Hospital. O.P.D. Medical Department. "Examined by six doctors—they noticed something in the left side of the abdomen but didn't say anything."

#### 1929

January. Private physician. X-rayed. Diagnosis gastric ulcer. Sent to J.M. Hospital. Treated four weeks with Sippy Diet. Private physician. Stomach washed and high colonic irrigations. "He concluded I suffered from a nervous condition."

April. P. Hospital. O.P.D.

May. C. Clinic. Surgical Department. Abdomen x-rayed. Negative. Sent to Urological Department. Sent to Neurological Department. Sent to Psychiatric Department. Did not go.

N. Hospital. Surgical Department. Diagnosis Sarcoma of abdomen. Discharged in eight days with diagnosis of psychoneurosis. Referred to Psychiatric Department.

O.P.D. Wanted to be transferred to Medical Department. When this refused patient did not return.

June. E.D. Clinic. Sputum examined. Negative.

Private physician. Diagnosis-Post-operative adhesions.

Note to be admitted to B. Hospital for operation. Decides not to go there. July. N. Hospital. O.P.D. Surgical Department. Stomach fluoroscoped. Negative.

B. State Hospital. Admitted as voluntary patient. X-rayed. Findings negative. Discharged October, 1930.

#### 1931

Working and supporting himself.

February. N. Hospital. O.P.D. Surgical Department. Barium enema and fluoroscopic examination of stomach and duodenum. Findings negative. Final diagnosis. Psychopathic Personality. Psychoneurosis with neu-

rasthenic and hypochondriacal symptoms.

The disorders presented by this last group of patients are typical of the most frequent complication in general medical practice. Unless the physician has been trained to recognize and deal with psychoneurotic patients he is prone to neglect them or to prolong their illnesses by paying too much attention to symptoms.

Some physicians are annoyed by these patients and some are inclined to feel that a psychoneurotic patient could get rid of his complaints if he chose. Sometimes it appears that a psychoneurotic illness is inevitably chronic or that the abnormal suggestibility of the patient is responsible for the temporary improvement following almost any form of treatment.

As a matter of fact generalization is not possible as each patient is an individual problem. Nothing short of a thorough psychiatric investigation can determine the method of dealing with this problem and the chances of a better adaptation. Often there are social and economic factors which may be modified and there are many opportunities for improving personal hygiene. Some patients may require psychiatric supervision for long periods.

In the group presented above the patient J. K. obviously requires some help in the adjustment of the domestic situation as well as supervision of her own personal hygiene. P. M. requires anti-luetic treatment and supervision of his diet and elimination. It is obvious that illnesses should not be suggested to him through medical interpretations of his symptoms. T. M. was promptly discharged from the hospital and after a few psychiatric consultations he adjusted some of his domestic difficulties and reorganized his mode of living. This was done four years ago and there has been no recurrence of his illness.

E. M. also was promptly discharged from the hospital. With an adequate diet she quickly gained her normal weight and as she stopped drinking tea and coffee she lost her symptoms of hyperthyroidism. She has been given anti-luetic treatment for the past four years without any change in her Wassermann reaction.

The last two cases cited illustrate the degree to which medical or surgical practice may be complicated when the therapy of psychoneurotic patients is undertaken. If a thorough psychiatric investigation had been made of M. W. before her chronic appendix had been removed the surgeon might have postponed operative procedures indefinitely. There seems to be little doubt but that the patient suffered from post-operative adhesions but in all such cases the symptoms are greatly exaggerated and easily suggested. Moreover, this patient was masochistic and addicted to the use of sedative drugs before she was treated surgically. It is known that she was untruthful regarding the addiction and it is not improbable that she welcomed a kind of hospital treatment which included drug therapy.

The problems in the case of A. P. were equally difficult although of a somewhat different nature. After an intelligent psychoneurotic patient has been examined a few times and heard his case discussed he becomes expert in calling attention to those features of his illness which suggest physical disease. Often there may be opportunity for difference of opinion and in such cases all physicians agree that physical and laboratory examinations must then be made. Social service organizations attempt to keep hospitals informed regarding chronic visitors but this also is difficult to accomplish in large cities.

Not only are patients with actual physical illness being deprived of adequate care through this duplication of work but the efforts of the psychiatrist in treating psychoneurotic patients are being thwarted. Even the suggestion of a physical illness affords an escape from the contemplation of personal conflicts and as long as this refuge is made available the patient tends in the direction of chronic neurotic invalidism.

This glimpse of the practical application of psychiatry may fail to impress the reader because it may be assumed that such cases are unusual. As a matter of fact, however, it can be easily demonstrated that at least ten percent of the cases in any general hospital are chiefly psychiatric. As a rule they are not recognized because the physician is trained to associate symptoms with organic disease and to eliminate even the possibility of such a disease before a functional illness is considered. This mode of procedure has the appearance of being scientific but it is really indirect, laborious and time-consuming. It is not scientific in so far as it does not consider all of the facts.

It must be admitted that the psychiatric approach is one of the most difficult but it is an art which all physicians should try to acquire. There is no simple formula which may be followed and it is necessary to make some adaptation of certain principles in each case. The introduction to the patient should be informal and there is no need of divulging the purpose of the visit. A more pretentious approach is likely to frighten the patient or place him on the defensive. Such questions are asked as are calculated to elicit a spontaneous account of the illness and as far as possible the physician plays the rôle of a sincerely interested but non-committal listener.

Sometimes it is advantageous just to listen until the patient's general trend is comprehended and then the more significant details may be recorded in chronological order. It is often desirable to make parenthetical notes of the patient's attitude, the interest which he displays in his symptoms and the effort which he makes to impress the physician with the seriousness of his illness.

Due consideration must always be given to the facts and their interpretation as presented in the record of any given case but there is always the possibility that the clinical picture as recorded may be misleading. It is as necessary to determine the facts in psychiatric

work as in any other branch of medicine. Plausible theories and impressions have little place in actual clinical practice.

Several years of experience with this kind of psychiatric experience have caused me to arrive at the following general conclusions:

- 1. Every general hospital should have a psychopathic department and at least one attending psychiatrist.
- 2. Except in emergencies no eccentric or neurotic individual should be submitted to an operation or started on a prolonged course of treatment without psychiatric consultation.
- 3. No medical student should be permitted to graduate without having taken a course in the psychiatric aspect of general hospital practice.
- 4. A period of study in a psychopathic hospital should be a part of all hospital internships.
- 5. In giving psychiatric instruction the emphasis should be placed upon the less obvious disorders which so frequently complicate general medical and surgical practice while the well-developed psychoneuroses and frank psychoses should be studied chiefly for the purpose of giving perspective.
- 6. All staff conferences in general hospitals should be attended by the psychiatrist so that there may be a mutual exchange of medical experience and frank discussion of those cases in which there are psychiatric problems.

## CHAPTER XX

## PSYCHIATRIC HISTORY<sup>1</sup>

Among primitive peoples the belief that disease is a manifestation of the caprice or design of some supernatural being seems to be universal. Illness may be due to the whim of a malevolent deity, the vengeance of an offended divinity, or it may be a punishment from the gods for the commission of sin. All morbid conditions are brought about through the agency of evil spirits which surround man on every side. It is natural then that efforts are made to propitiate these demons, or to expel them in case they have gained entrance to the body. Appeal is made for the assistance of the benevolent gods through the use of prayers and sacrifices and when they do not respond, compulsory intercession is obtained through magic ceremonies.

From the most remote times such beliefs and practices were common among the peoples of ancient india, Egypt, Babylonia, Assyria, Phoenicia and Greece, and during the middle ages there was a regression to this mingling of the arts of magic and sorcery with religious rites from which we have not yet fully recovered.

Until comparatively recent times no distinction was made between mental and physical illnesses and the treatment was essentially the same. Those persons whose illnesses were obnoxious were ostracized and obliged to care for themselves as best they could. Others were disordered in such a way that they were prone to avoid the society of their fellow beings. The wealthy or powerful received attention according to their ability to make sacrifices, to pay for elaborate ceremonials or to command the personal attention of servants and slaves.

When social life began to be organized venerated altars were erected by the tribe, usually near some natural object such as a tree, standing stone, spring or stream which had been held sacred. In later periods, permanent temples for the shelter and protection of the deity and the treasures of the sanctuary were erected in the villages, prefer-

<sup>&</sup>lt;sup>1</sup> For a complete history of psychiatry see a book by Zilboorg, G. and Henry, G. W. being published in New York.

ably on elevated ground and near medicinal springs. They were in charge of priests who were especially trained to supervise prayers and sacrifices, conduct the rites of incantation, dispel evil spirits and interpret dreams. The Chaldean priests became particularly adept in noting the significance of omens which arose from the movements of heavenly bodies.

In Egypt many temples were erected in the valley of the Nile and later they were concentrated in the chief medical centers. To these temples, dedicated to Saturn, large numbers of people came, some traveling long distances or making annual pilgrimages to seek the curative beneficence of favorite divinities.

The descriptions of the principles and methods of treatment used in these temples indicate that they were directed by individuals with most enlightened views and that they compare very favorably with the best health resorts and sanatoria of the present time.

In Greece these healing sanctuaries reached their highest development. Shrines for the relief of the sick originated through the worship of Aesculapius, the god of healing, whose two sons, Machaon and Podalirius, obtained fame for their superior skill in treating the wounds of the Trojan warriors. Their descendants formed a healing cult of priest-physicians, and they established shrines in various places, some of which were the beginning of famous medical centers.

It was in one of these centers that Hippocrates became a learned physician and where with the aid of its records and his own vast clinical experience he described such disorders as mania, melancholia, paranoia and phrenitis. These disorders correspond roughly to what are now described as states of excitement, depression, mental deterioration and toxic-infectious deliria.

Mental illness had been described long before his time, however, as it is not at all peculiar to civilization. Even primitive man had to contend with the occasional mysterious transformations of a fellow being which caused him to be hilarious when the presence of an enemy demanded absolute silence.

According to ancient legend Ulysses feigned madness by plowing the seashore and sowing salt instead of corn, in order to avoid service in the Trojan war. Likewise in biblical times David "scrabbled on the doors of the gate, and let spittle fall down upon his beard" in order to avoid being held captive by the King of Gath. We have descriptions of recurrent attacks of depression in the record of Saul who lived ten centuries B.C.

The belief that mental illness was due to divine influence seems to have been universally accepted until about five centuries B.C. when Hippocrates boldly declared that it was a disease of the brain due to natural causes and particularly to an excess of bile. His reputation as a distinguished physician was extraordinary and his scientific writings exerted a powerful influence over medical practice for many centuries. On one occasion he was called to examine his famous contemporary, Democritus, who was believed to be mad because he sat by himself dissecting animals. Hippocrates soon discovered however that he was a learned man who through his dissections was trying to find the cause of madness.

Among the illustrious physicians who followed Hippocrates there were several who paid special attention to mental disorders. In the first century A.D. Aretaeus seemed to appreciate the relationship of melancholia and mania as he said that "melancholia is commonly the beginning of mania." He also differentiated mania from senile psychoses. He said that mania is intermittent and could be entirely cured by good treatment while a mental illness in old age is a calamity because it is progressive and incurable.

The treatment given by the ancient Greek physicians compares very favorably with that of modern times and in some respects it may have been superior. Hydrotherapy was highly developed and one physician is said to have invented over a hundred different kinds of baths. There was much specialization in diet and elimination was aided by means of emetics, purgatives and enemata. All kinds of exercise and recreation were employed and to this were added massage with inunctions, friction of the skin, heliotherapy and transportation in a swinging chair. Drugs were used much more extensively than at the present time and in accordance with the theories then prevailing. Alcoholic beverages, restraint and abuse were recommended by some physicians and vigorously condemned by others. The beneficial effects of occupational therapy were acknowledged by all physicians.

In the use of some forms of psychotherapy the ancient Greek physicians excelled. Instruction was given in vocal and instrumental music and musical entertainment was frequently employed. The patients were engaged in conversation, they were asked questions, they were required to study and to memorize. Whenever a group was entertained certain persons were designated to lead in the ap-

plause. They read and were entertained by professional readers. They even resorted to wrangling in the hope of diverting the habitual trend of thought and feeling. During convalescence the patient was permitted to listen to the discussions of the philosophers. Their treatment might be completed by a stay at the seashore or by an ocean voyage. After discussing therapy in great detail Soranus adds that he has had many patients who were "cured by good counsel and persuasion alone."

It seems that the Greek physicians were as adept at constructing plausible formulations for the understanding of illness as some of our contemporaries. They firmly believed that hysteria was due to the wanderings of the uterus and that it might move upwards sufficiently to cause a feeling of suffocation. In order to induce the uterus to return to its proper position they would apply foul smelling substances to the nostrils<sup>2</sup> and fragrant substances to the genitalia. No one seemed to question this belief or these practices until in the second century A.D. Galen somewhat brutally insisted that such a fallacy was possible only through the ignorance of human anatomy.

With the death of Galen in 200 A.D. the medical progress made by the ancient civilizations was at an end and the decline in psychiatry had already begun. For a few centuries longer the writings of the pagan physicians were copied or abstracted but finally they were suppressed. Psychiatry as well as other branches of medicine reverted to the beliefs and practices which were current before the time of Hippocrates. Superstition, mysticism, belief in supernatural influences and magic again became prevalent.

With this change the study and treatment of mental illness once more became the province of the clergy. In the fifth century St. Augustine declared that mental illness was the work of either the devil or angels. It was assumed that each person might choose whether or not he would commune with the devil. If the illness was found to be due to the devil the person was considered sinful and if it was due to the mysterious work of angels the person might be revered.

In spite of the growing belief in diabolical possession the treatment of the mentally sick during the early centuries of the Christian era was on the whole characterized by kindliness and good intentions. They were permitted to attend public worship and the monks attempted to

<sup>&</sup>lt;sup>2</sup> Foul-smelling potions are still occasionally recommended for hysterical patients.

relieve them by means of holy water, sanctified ointments, the touching of relics, visits to holy places and by mild forms of exorcism.

Every priest was obligated to perform the duties of an exorcist and was ordained to cast out demons. By placing his hands upon the possessed and uttering certain words or formulae the evil spirits were supposed to be driven out.

By the tenth century however it was generally believed that an individual possessed of demons must be treated cruelly in order to punish the demon residing within. As a consequence the treatment of such persons degenerated into punishment by imprisonment and various forms of torture. If they were found guilty of sorcery they might be burned alive.

This period was especially difficult for hysterical persons because one of the unfailing signs of demoniacal possession was an area of anaesthesia. Special inquisitors were appointed to seek out these persons. They had assistants called prickers whose duty it was to prick the suspected person until some anesthetic zone was discovered.

This downward trend was interrupted for a while in the eleventh and twelfth centuries by the invasions of the Arabs. They brought with them much that had been preserved from the ancient civilizations but as soon as it became evident that the teachings of the Christian church were being contradicted the pagan writings were suppressed or burned.

During the centuries that intervened after the death of Galen there was an occasional distinguished Arabian or pagan physician who kept alive some of the traditions of the past. They continued to describe various forms of mental illness and to recommend appropriate treatment. They did not contribute anything new and their sources of knowledge were the inaccurate translations of the original Greek writings.

Their descriptions of a form of illness called lycanthropy give an excellent picture of the condition of some of the mentally sick during this period. This illness was more prevalent and grotesque in its manifestations during the middle ages than at any earlier period. It was believed to be due to demoniacal possession. The persons affected claimed that they had made pacts with the devil and had thus obtained the power of being transformed into owls, cats, wolves and other animals in order to more easily engorge themselves with blood and flesh. While in this metamorphosed state some of them

believed that they were covered with hair and had dreadful claws and teeth by which they tore men and animals to pieces. They claimed that they roamed about at night in search of prey, that they had sucked the blood of nurslings and had committed many murders. It was stated that such persons were actually observed, moving about on hands and knees and imitating the cries of wolves while carrying away the remains of cadavers.

After the twelfth century there were added to the theological views on demonology a mixture of astrology and pharmacologic magic. This is well illustrated by the beliefs of Arnold of Villanova. He declared that the color and heat of the planet Mars influenced the condition of the bile and therefore was the cause of melancholia. When treatment by bleeding was undertaken it must be done according to the phases of the moon and according to certain constellations of the heavenly bodies. At the same time in the treatment of insomnia he advised the reading of the Gospel of St. John and the recitation of the names of the seven sleepers.

Great benefit was supposed to be derived from a mixture of herbs, holy water and foreign ale. Holy water was made more effective by the addition of salt as this mixture was abhorred by the devil. A person troubled with hallucinations was advised to eat well dressed and sodden wolf's flesh. One of the more elaborate forms of treatment for melancholia consisted of "emetics, purges, opening the veins under the tongue, blisters, issues and shaving the head, followed by a cataplasm upon it, the backbone anointed with a very choice balsam of earthworms or bats." This conglomeration in theory and practice continued for about four centuries.

Mental illness became an even greater calamity with the growth of the belief in witchcraft. Witch-finding inquisitors were authorized to scour Europe in order to discover persons who were alleged to be in league with the devil. By the beginning of the fifteenth century popular superstition and excitement had risen to such a height that anyone was liable to be accused of sorcery. The presence of mental illness was presumptive evidence that the person affected was in league with the devil. Such a person was disavowed by his own family and was literally thrown into the street. Unable to care for himself he might wander along the roads or in the woods or he might live in stables with horses and cows until eventually he lost all vestiges of his former appearance.

Many of these persons voluntarily accused themselves of being witches and in addition a large proportion of those accused of sorcery became unbalanced when confronted with the prospect of torture and death. The fate of all was the same. Some were imprisoned but the majority were burned alive.

While this was in progress and associated with the indescribable hardship and suffering caused by the plagues, notably the Black Death,<sup>3</sup> there appeared a series of epidemics of jumping, dancing and convulsive disorders. A large proportion of those who participated were mentally sick or hysterical. These disorders spread all over Europe as rapidly as the plagues and they continued to be a grave social problem from the thirteenth to the eighteenth centuries.

With the gradual enlightenment which brought about the renaissance there were signs of a better understanding of the mentally sick. In the middle of the sixteenth century a physician, Jean Wier, was bold enough to express his conviction that "many of the so-called victims of diabolic possession were really simply lunatics." A Dutch physician, Boerhaave, stopped a convulsive epidemic in a hospital in Haarlem by threatening to burn the arms of those affected. At about the same time the French government quietly removed those persons who were most expert in the knowledge and dealings with diabolical influences and gave instructions to the police to remove those afflicted to asylums.

Perhaps no better evidence can be found of the extent to which people may be the victims of ignorance, superstition and prejudice than is afforded by the history of the institutional care of the mentally afflicted. Many centuries of training in the belief that these unfortunate persons were possessed by demons left marks which could not readily be effaced. The pandemic of torture and burning of the bewitched provided an excellent background for the brutal treatment common to the institutions of all civilized countries. The generally accepted probability that these persons became thus afflicted by voluntarily consorting with infernal spirits made it obligatory for the righteous to administer appropriate punishment.

Whatever unfavorable comment may be made upon the monastic treatment the clergy were usually interested in the welfare of their patients. As monastic control gradually passed into the hands of public authorities, old evils persisted and grew while the earlier benevolent human interests gradually died out. Because of the nature of

<sup>3</sup> Nohl, J.: The Black Death, London, 1926.

their illness the patients were unable to plead their own cause and the few enlightened and compassionate souls who struggled to lessen the burdens of their unfortunate fellow beings were overwhelmed by popular indifference or prejudice.

It was not until the middle of the eighteenth century that public interest began to be directed toward the care of the mentally ill and the increasing knowledge of the deplorable conditions in hospitals prepared the way for a reformation.

A number of physicians had advocated this change but it remained for Pinel to put into actual practice the humane treatment of his patients. This required great courage and unusual perseverance as the government suspected him of harboring enemies. His requests were finally granted and in 1793 at the Bicêtre he initiated a reform which has been a blessing to the mentally ill throughout the world. He began by liberating over fifty patients from chains and dungeons and within two years inhuman restraint and confinement were replaced by promenades and workshops.

Pinel continued to be regarded with suspicion, however, and this was increased to alarm when the rumor was spread that he was about to turn the lunatics loose upon the community. It is a curious comment upon human reactions that as he was about to be hanged by an angry mob he was rescued by a former patient whom he had liberated from chains.

While Pinel was thus occupied with the emancipaton of the mentally sick from the yoke which centuries of superstition, ignorance and neglect had placed upon them another reformation was quietly taking place in England. William Tuke, a merchant, had become aroused by the mysterious death in York Asylum of a Quaker woman. Suspicion as to the cause of her death was increased through the fact that her relatives had not been permitted to visit her. in the history of madhouses was the immediate cause of a proposal in 1792 to the Society of Friends by Tuke that they erect an institution of their own where a "milder and more appropriate system of treatment than that usually practised might be adopted." The opening of York Retreat four years later was the beginning of a new era in the treatment of the mentally sick. Restraint and abuse were replaced by kindness and tolerance, by working in the garden and gentle exercise on the surrounding grounds, and by light recreations and This was the beginning of what was called moral amusements. treatment.

In spite of these admirable attempts to improve the conditions found in institutions another half century passed before the reformation became generally effective. It is difficult to understand how society could tolerate such conditions as were revealed by the investigation of madhouses of England in 1815 or the deplorable state of asylum life in France even forty years after Pinel liberated his patients. According to one description "the cells were still narrow, damp and dark, and some of them underground; air and light only admitted when the door... was opened. The furious maniacs slept on the ground, and the helpless lay on straw, seldom renewed; the attendants were still slovenly in appearance and brutal in manners, and entered the cells armed with sticks, whips, and accompanied by savage dogs."

It is improbable that the care of the mentally afflicted ever reached such a low ebb in the United States.<sup>4</sup> But it must be remembered that the early colonists brought with them the deeply rooted superstition of the layman as well as the gross misconceptions of the physicians. They could not readily dislodge the ideas of demoniacal possession and as a result near the close of the seventeenth century in the town of Salem fifty-five persons were tortured and twenty were executed as witches.

Even at the beginning of the nineteenth century the mentally sick were commonly identified with paupers, vagabonds, feeble-minded and criminals. Most of those who were harmless and capable of maintaining themselves were permitted to wander about the country, the objects of pity and derision or the prey of the unprincipled.

On account of these deplorable conditions certain philanthropic and benevolent persons began to provide for the care of patients in private institutions. For this purpose the Pennsylvania Hospital was chartered in 1751; the Eastern State Hospital at Williamsburg, Va., was incorporated in 1768, and the New York Hospital in New York City (a ward of which later developed into Bloomingdale Hospital) was chartered in 1771. Several other private hospitals were started in the next half century. For about a century, however, the majority of patients were cared for in city and county institutions (poorhouses and jails), which were managed by inexperienced persons who were more interested in economy than in humanity. The inade-

<sup>&</sup>lt;sup>4</sup> For details see Henry, G. W.: The Care and Treatment of Mental Disease—Yesterday and Today, Modern Hospital, Vol. 33, No. 5, and also The Development of Hospital Care and Treatment of Mental Disease, The First International Hospital Congress, Paris, 1930.

quacies and abuses of these institutions led to the establishment of state hospitals, the first of which was opened in Worcester, Mass., in 1832.

Much of the progress made in obtaining better care for the mentally sick was due to the personal efforts of Miss Dorothea Dix who visited the various places in this country where patients were kept, and presented to the state legislatures the actual truth in regard to conditions found. She made successful appeals for aid, and finally in 1848 presented to Congress a memorial describing the necessity for relief. She gave harrowing descriptions of conditions in private houses, almshouses and jails, where patients were kept in chains and irons, in cages and filthy cells and "reduced to the most abject moral, physical and mental prostration." The influence of her work was felt not only in this country, but also in Canada and Europe.

As the stigma of insanity began to pass and the quality of institutional care improved, a greater number of patients with recoverable illness were admitted. Adequate care has never been provided however<sup>5</sup> and even at the present time it would be impossible to deal with the large numbers who are mentally ill if it were not for modern psychopathic hospitals and clinics as well as the assistance of social service organizations.

Prophylactic therapy has ceased to be merely a vision largely through the activities of the National Committee for Mental Hygiene founded in 1909. This organization has also been chiefly responsible for the rapid development of social psychiatry.

The number of physicians who have contributed to the progress made in clinical psychiatry is too great to even mention their names. Instead of this brief comment will be made upon some of the modern leaders.

Throughout the history of psychiatry there have been many attempts to classify and describe the various forms of mental illness. This has been difficult because of the numerous misconceptions and the fact that personality disorders are so variable in their manifestations that classical descriptions are little more than theoretical composites of actual clinical conditions. Such descriptions have been very useful as patterns in the study of individual cases and we are indebted to the work of Emil Kraepelin for much of the progress in

<sup>&</sup>lt;sup>5</sup> Russell, W. L.: Community responsibility in the treatment of mental disorders, Mental Hygiene, 2:416.

Salmon, T. W.: The insane in a county poor farm, Mental Hygiene, 1:25.

accurate and detailed clinical observation that has been made since that latter part of the nineteenth century.

This rather formal and static psychiatry of Kraepelin has been greatly modified as a result of the psychoanalytic investigations of Freud and his followers. We now have a much better understanding of the conflicts which arise in the unconscious and their relation to personality disorder. Psychiatry has become dynamic, a study of strivings rather than simply a scientific notation of their manifestations. The psychoanalytic movement has been largely responsible for the recent scientific interest in the psychoneuroses and has provided a means of dealing with these disorders through the eradication of fundamental causes rather than the modification of symptoms. It has called attention to the extreme importance of carefully studying the trend of thought and feeling of all patients. What were once the meaningless ramblings of the insane have now become the means of understanding the problems in any given case.

Freud has made this contribution in spite of the most intense and bitter opposition. This opposition may have been part of the inevitable resistance to the acknowledgment of painful truths but it has had all of the appearance of personal animosity. It is unfortunate that his followers could not have remained true to his ideals of clinical work instead of trying to apply psychoanalytic principles to all fields of human endeavor.

We are indebted finally to Adolf Meyer for the introduction of the modern methods of obtaining histories and making examinations and the present system of making clinical records. Perhaps his greatest contribution to modern psychiatry has been his teaching that all factors—hereditary, environmental, constitutional, physical, social and economic, conscious and unconscious,—which have contributed to the actual life situation of the individual, shall be accurately determined and evaluated for the purpose of ascertaining the extent to which any or all of these factors may be modified and so that intelligent assistance may be given in the search for a better adaptation to the immutable. He deals with disorders in which the entire individual and his environment are involved. He insists that the practice of psychiatry must be in accordance with "common sense" even though the solution of some of its problems may require more experience and the exercise of finer judgment than any other human task.

## MILESTONES IN PSYCHIATRIC HISTORY

B.C.

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- c. 1000 Homer describes cases of mental illness.
- c. 700 Mentally sick patients treated in Greek temples of healing.
- c. 400 Hippocrates declares that mental illness is a disease of the brain due to natural causes rather than to divine influence.
- c. 390 Democritus dissects animals to find the cause of madness.
- c. 380 Plato in his Republic foreshadows the psychoanalytic interpretation of dreams.
- c. 60 Cicero declares that melancholia may be due to painful emotions.
- c. 20 Celsus declares that madness is an affection of the entire body.

A.D.

- c. 310 Hospital for mental illness established at Byzantium.
- c. 430 Roman law requires children to care for insane father.
- c. 700 Beginning of colony at Gheel, Belgium.
- c. 1250 Mentally sick received in general hospital at Cairo, Egypt.
  - 1425 Occupation therapy employed in asylum at Saragossa, Spain.
  - 1532 Charles V requires evidence of physicians in doubtful cases of insanity.
  - 1639 Founding in Quebec of Hotel Dieu, the first institution in America to receive mental patients.
  - 1645 Madame Le Gras begins instruction in mental nursing.
  - 1672 Thomas Willis describes cases of general paresis.
  - 1674 Louis XIV abolishes crime of witchcraft; accused persons must be treated for madness.
  - 1752 Pennsylvania Hospital receives mental patients.
  - 1753 William Battie begins lectures on mental diseases to students and physicians in England.
  - 1788 Chiarugi abolishes use of chains and begins humane treatment in Florence.
  - 1793 Pinel frees patients from chains and dungeons.
  - 1796 William Tuke begins moral treatment at York Retreat.
  - 1812 Benjamin Rush, the Father of American Psychiatry, proclaims that deranged patients should be treated with respect and kindness.
  - 1817 William Ellis begins systematic treatment by occupation therapy in large institutions of England.
  - 1822 Bayle recognizes general paresis as a disease entity.
  - 1837 R. Gardiner Hill abolishes all forms of restraint in the Lincoln Hospital, England.
  - 1844 First issue of American Journal of Insanity.

- 1848 Dorothea Dix presents a memorial to Congress, an appeal for better hospital care.
- 1868 Scientific research into the problems of mental illness begun at Utica State Asylum.
- 1878 Psychopathic Hospital established at Heidelberg.
- 1880 Psychiatric social work begun in London.
- 1882 Nurses' training school established at McLean Hospital.
- 1889 Modern formal descriptive psychiatry begun by Kraepelin.
- 1895 Freud makes first contribution to psychoanalytic literature.
- 1901 Adolf Meyer begins new era of institutional care.
- 1906 Standardization of nurses' training schools in mental hospitals of United States.
- 1909 Establishment of National Committee for Mental Hygiene.
- 1918 Training for psychiatric social service work begun at Smith College.
- 1922 First child guidance clinic opened.

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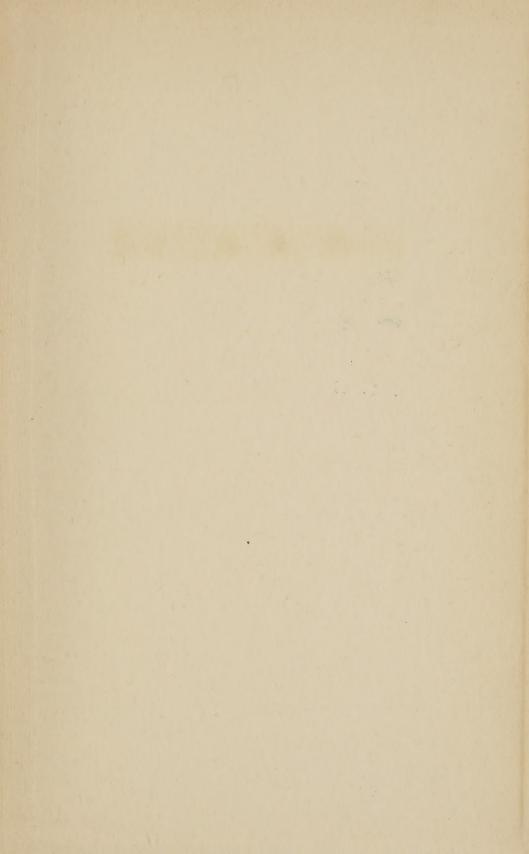








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